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ABSTRACT
               This guidebook describes an instructional and
curricular tool, the Unipac, which teachers can use to individualize
instruction..The Unipac is defined as a lesson plan for learners, a
self-contained set of teaching-learning materials designed to teach
any single topic; it is structured for individual use and aids the
development of a continuous progress school program..Its overall
purpose is to motivate students to initiate their own objectives and
learning activities..In addition, the guidebook provides a rationale
for Unipac use and shows how it differs from traditional approaches
since it is student-oriented and focused on behavioral objectives.
The guide lists the components of the Unipac as a concept to be
learned, sub-concepts, behavioral objectives, pre-tests, learning
activities, self-evaluation, quest activities, post-tests, and
feedback. It also details how to construct and use a Unipac,
discusses the roles of teachers, students, and others, mentions some
concerns relevant to their use, and gives instructions on how to
evaluate them. (PB)

GUIDEBOOK FOR TEACHER USE IN
INDIVIDUALIZING INSTRUCTION
THROUGH USE OF UNIPACS
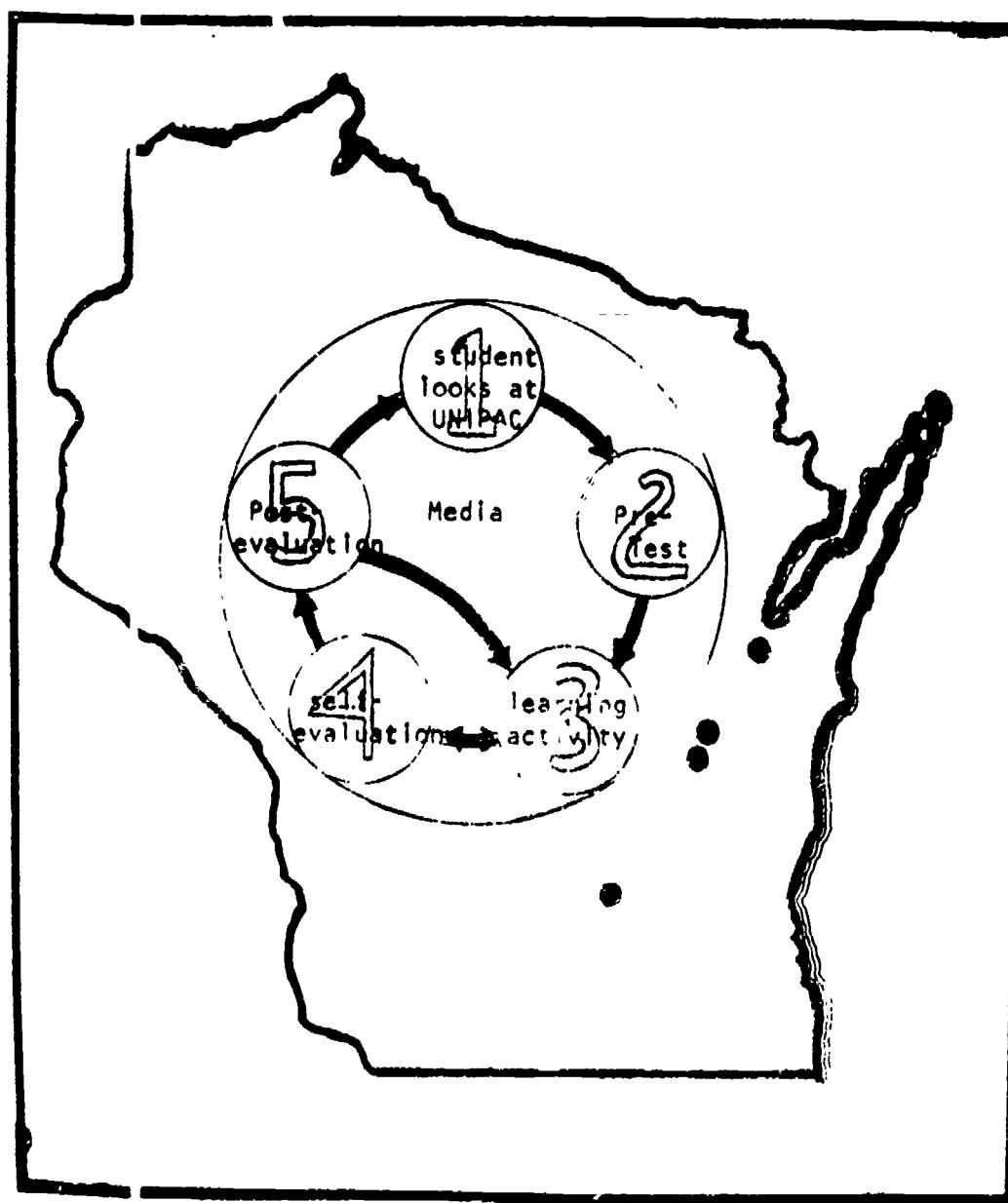
WISCONSIN CONSORTIUM FOR INDIVIDUALIZED LEARNING

E.S.E.A. - TITLE III

"If A Student Is To Be Allowed To Move At His Own Pace,
If He Is To Be Presented With Appropriate Learning Tasks,
And Given Greater Responsibility For His Learning,
HE MUST HAVE AVAILABLE A PLAN FOR LEARNING."

This guidebook represents a first attempt to describe
instructional and curricular approaches, which classroom
teachers can use in their efforts to individualize instruc-
tion. It represents also an effort at showing the "why,"
"what," and "how" of using unipacs as the organizational
tool in development of an individualized instructional
program.

Contributors - Summer, 1971

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Preface

A. Purposes and Goals of the Guidebook:

This guidebcok has been prepared to provide teachers the opportunity to examine some of the ramifications of using unipacs in their instructional approaches. The unipac represents a tool that teachers can develop for student use as they design and implement their teaching strategies.

By definition, we refer to the unipac as: *A self-contained set of teaching-learning materials designed to teach a single topic. It is normally structured for individual and independent use with provisions developed for interaction with other learners and/or teachers as needed. It lends in the development of a continuous progress school program.*

The reader will find within this guidebook a rationale for using unipacs, instructions for constructing unipacs, and suggestions for actual use with learners.

In addition, some of the more common problems, along with possible solutions, will be presented as they have been met and are being solved by teachers with previous experiences in using unipacs.

Implementation of unipacs often requires role changes in the behaviors of teachers. Therefore, it is necessary for teachers to understand those changes prior to usage of these types of materials. Consequently, the guidebook contains a section dealing not only with the role of the teacher, but also concerned with role functions of the student, administrator, and community.

Finally, because the writers feel strongly that the real purpose of school is to "learn how to learn," models are presented as guides in helping teachers develop in learners an appropriate model to follow in their life-long learning. Opportunities for greater self-assessment, self-prescription, self-involvement in appropriate activities, and self-evaluation are key ingredients in the evolving models presented. To motivate students to initiate their own objectives and learning activities enabling greater self-direction and independence is the overall purpose of this booklet.

What follows are suggestions which teachers interested in using unipacs as a tool in developing self-directed learners may find helpful. Hopefully, the material will be useful and those using it will assist us in improving it by completing the evaluation form in the back of the booklet

GLOSSARY OF TERMS

<u>Affective Domain</u> - Those objectives which describe changes in interest, attitudes, and values, and the development of appreciations' and adequate adjustment.

<u>Behavioral Objective</u> - An objective stated in terms which are observable and measurable and which contain the performance expected, the conditions under which it will be performed, and the degree of proficiency or extent to which it must be performed; sometimes referred to as preformance objectives or learning objectives.

<u>Cognitive Domain</u> - Those objectives which deal with the recall or recognition of knowledge and the development of intellectual abilities and skills.

<u>Concept</u> - A single learnable idea, skill, or attitude.

<u>Continuous Progress</u> - A curricular approach whereby students work at rates commensurate with their abilities and which elicit student mastery of a given set of objectives which may or may not be sequential in nature. Completion of the course is based on mastery of the objectives rather than length of time in the course.

<u>Curricular Approach</u> - The teaching design which brings together the components of the course and method of instruction - everything in a teaching learning process: climate, organization, experience and materials for learning.

<u>Diagnosis</u> - The act of formulating a decision or opinion as a result of a careful investigation of the facts.

<u>Feedback</u> - Test results, comments, and attitudes of participants which are made known to the designer of the activity.

<u>Individualized Learning</u> - The process of learning as it relates to the unique interests, capabilities and needs of the student.

<u>Learning Activity Package</u> - see Unipac.

<u>Learning Team</u> - Any grouping of students, students and staff, students and resource people, or students and para-professionals which will enhance learning.

<u>Media</u> - Any one of the means of communication used such as text, films, slides, tapes, TV, newspaper and magazines.

<u>Mini Course</u> - A course, which has an expected time duration of less than one semester.

Openended - A learning experience where the student designs his own objectives or his own activity or both.

Post-Test - A test given at the completion of the unipac in order to ascertain if the behavioral objectives of the unipac have been attained.

Pre-Test - Tests taken prior to unipac work in order to permit diagnosis and selection of the proper activities to attain behavioral objectives of the unipac.

Psychomotor Domain - Objectives which emphasize some muscular or motor skill, some manipulation of material and objects, or some act which requires a neuromuscular co-ordination.

Quest - Activities which are learner-initiated and not assigned. These activities may or may not be directly related to the main course of study.

Self-Initiated Learning - Learning in which the student selects or constructs the behavioral objectives, the learning activities, and the evaluatory experiences for himself.

Self-Prescription - Direction initiated by the learner in an attempt to successfully attain the stated objectives.

Self-Tests - Check points which give the learner feedback necessary to assess progress toward accomplishment of the behavioralized objectives.

Test Out - A process whereby a student can pass over a course or prescribed unipac if he can demonstrate that he has attained the objectives ascribed to that course or unipac.

Unipac - A self-contained set of teaching-learning materials designed to teach a single topic. It is normally structured for individual and independent use with provisions developed for interaction with other learners and/or teachers as needed. It lends i. the development of a continuous progress school program. (Modification of the definition of unipac as originally defined by I/D/E/A).

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Rationale FOR THE USE OF UNIPACS

The first and most logical question any teacher might ask about unipacs is. "Why, with the many existing teaching tools should I add still another?" The answer is quite simple. He should not add anything unless it will help him teach more efficiently and will result in the student learning more effectively. The writers of this guidebook feel unipacs can be such a tool. Further, it is felt that the unipac has value in all subject areas and can be integrated into any existing course structure. In other words, the unipac, while not a cure all for the problems confronting today's teachers, is an effective teaching tool that has something to offer to all teachers.

One basic concept underlying the use of the unipac is that students will learn better if they *(1) know what it is they will be able to do as a result of the learning experience, (2) receive experiences which help them meet the stated objectives, and (3) then demonstrate that they are able to accomplish it.* The degree of commitment to this format of instruction will be dependent upon the subject area and other variables that may tend to restrict or enhance its use.

A question often asked is, "How does preparing unipacs differ from lesson plans and courses of study which teachers normally prepare?" Basically, the differences are twofold. Previous.., prepared materials have generally been teacher oriented. They tell the teacher what he is going to do. The unipac is student oriented. Responsibility for learning is placed with the student. Learning is not looked upon as something the teacher does to the student.

Additionally, the objectives of the lesson are spelled out clearly in behavioral or performance terms at the beginning of the unipac. This means the learner will know precisely what behavior he will be asked to demonstrate, and under what conditions it is to be demonstrated. No longer does the student have to guess what it is the teacher wants him to accomplish.

Once objectives have been stated in behavioral terms, it is easier for teachers to identify learning activities which are appropriate to various styles of learning in meeting the objectives.

The unipac puts at the teacher's disposal a unique instrument for learning. Since the unipac is a precursor of fully self-initiated learning it can be used to carry the student through a number of learning paths.

I. Remedial work in regular classes.
    A. Unipacs can be constructed which will emphasize a single concept or group of concepts which need special strengthening.
    B. Weaknesses discovered on diagnostic tests can be eliminated through the use of appropriate unipacs, thereby bringing the student up to admission level.

II. Make Up
   A. Even though an entire course is not "packaged," unipacs
      make excellent vehicles for learning when a student has
      been absent for a period of time.
      1. Unipac directed learning can be pursued at a student's
         own rate and interest.
      2. The unipac provides a "pretailored" learning experi-
         ence to bridge the gap of non-attendance.

III. Recycling
   A. When a student deficiency is discovered, the single
      concept unipac is an excellent tool for shoring up the
      deficiency and returning the student to the main stream.
   B. A single concept unipac used here can be thought of as
      a branch program used to return the student to the main
      learning program.

IV. Course Development
   A. As teachers and students gain more experience with the
      unipac as a learning vehicle, confidence will grow in
      packaging entire courses.
      1. Unipacs focusing on cognitive domain are easiest to
         prepare.
      2. Affective domain objectives become more attainable
         with mutual experience.
   B. Precise skill
      Unipacs permit a closely directed focus on a single
      problem.
   C. Techniques - Unipacs can do an excellent job in developing
      psychomotor techniques such as titration in chemistry.

V. Quest
   A. Unipacs can readily be utilized in directing motivated
      students into areas beyond the normal scope of the course.

VI. Mini Courses
   A. Subjects of interest can be treated with a minimum of
      time rather than a year or semester. (single topic
      unipacs)
   B. Every unipac is a mini course when it is properly designed.

VII. The Open-Ended Unipac
   A. As experience in writing and using unipacs progresses,
      the student:
      1. SHOULD BE ENCOURAGED TO DEFINE HIS OWN GOALS.
      2. SHOULD BE CAPABLE OF SELECTING LEARNING EXPERIENCES
         TO REACH HIS GOALS.
      3. SHOULD BE ENCOURAGED TO DESIGN LEARNING EXPERIENCES
         TO REACH IDENTIFIED GOALS.
   B. This activity should lead to stimulating the student to
      engage in self-initiated learning.
   C. It will force the student into more areas where he must
      make independent decisions than in traditional settings.
   D. It should cross discipline lines and enter into multi-
      departmental cooperation in the school.
   E. Student written unipacs become practical.

The unipac thus represents a powerful <u>vehicle</u> which forces the
teacher and/or learner to organize learning experiences into logical
and consistent approaches. As teachers and/or learners clearly define
what it is students are to accomplish, relevant performance criteria
can more easily be prepared.

It must be noted that the use of unipacs as an organizational
and management tool will cause educators to examine more closely
changes in role functions necessary to meet individual learner needs.
The teacher's role will change more to that of a resource person.
An awareness of these changes must be recognized as this program develops
so that appropriate planning will take place as an initial step. This
will provide for the necessary changes in an orderly and constructive
fashion.

I. Its Component Parts

In essence then, the <u>unipac</u>
<u>is a lesson plan for learners</u>.
The basic format consists of:

A. MAJOR CONCEPT TO BE LEARNED
The single learnable idea,
skill or attitude is de-
scribed here.

- with -

B. APPROPRIATE SUB-CONCEPTS
These represent components
of the concept which, when
united, help clarify the specifics of the idea, skill, or
attitude to be learned.

Components

C. BEHAVIORALIZED OBJECTIVES
These are objectives stated in measurable terms indicating the
performance expected of the learner, the conditions under which
this will take place, and the extent or proficiency level
expected.

D. PRE-TESTS
The pre-test is one of the first things learners encounter
in using the unipac. The purpose of these tests, which can
take many forms, is to permit assessment of where the learner
is in relationship to the stated behavioral objectives, and
then aid in the selection of the proper learning activities
necessary to accomplish the objectives. It has been found
helpful to construct the pre-test in sections so there is a
correlation between the behavioral objectives and specific
parts of the pre-test. Thus, if the learner has already
achieved an objective, learning activities designed to help
achieve that objective could be omitted for him.

E. APPROPRIATE LEARNING ACTIVITIES
Provisions are made for the offering of as many varieties
of activities as is deemed practical and which resources
will permit. Thus all learners should experience learning
activities which will be appropriate to them in the acquisi-
tion of the behaviors stated in the behavioral objectives.

F. SELF-EVALUATION PROCEDURES (Self-Tests)
Tests or check points are included which give the learner
feedback necessary to decide whether to move ahead to the post-
test and completion of the unipac, or to return to the learning
activities and select further activities in preparation for
the post-test. These self-tests assist the learner and teacher
in assessing progress toward the behavioralized goals.
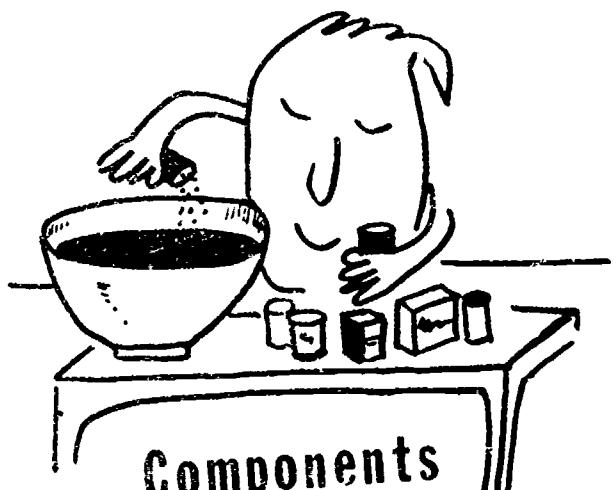
G. POSSIBLE DEPTH AND/OR QUEST ACTIVITIES
A list of possible suggestions which will carry the student
beyond the limits of the structured unipac is developed for
inclusion here. In most instances, depth activities are
teacher-initiated and assigned. Quest activities, on the other
hand, are learner-initiated and not assigned.

H. POST-TESTS
The final evaluation of pupil achievement as measured in terms
of the stated behavioral objectives is included here. The
evaluation should include provisions for students to perform
that which was described in the behavioral objectives.

I. PROVISIONS FOR FEEDBACK
A simple evaluation form through which users of the unipac
will give feedback concerning strengths and weaknesses of
the unipac should be used. This will help in giving teachers
some of the kinds of information which can be used in improving
materials.

The following schematic is representative of components of the
unipac which have been discussed:

CONTINUOUS PROGRESS
            - STUDENT'S SECTION
UNIT OF INSTRUCTION

Writing
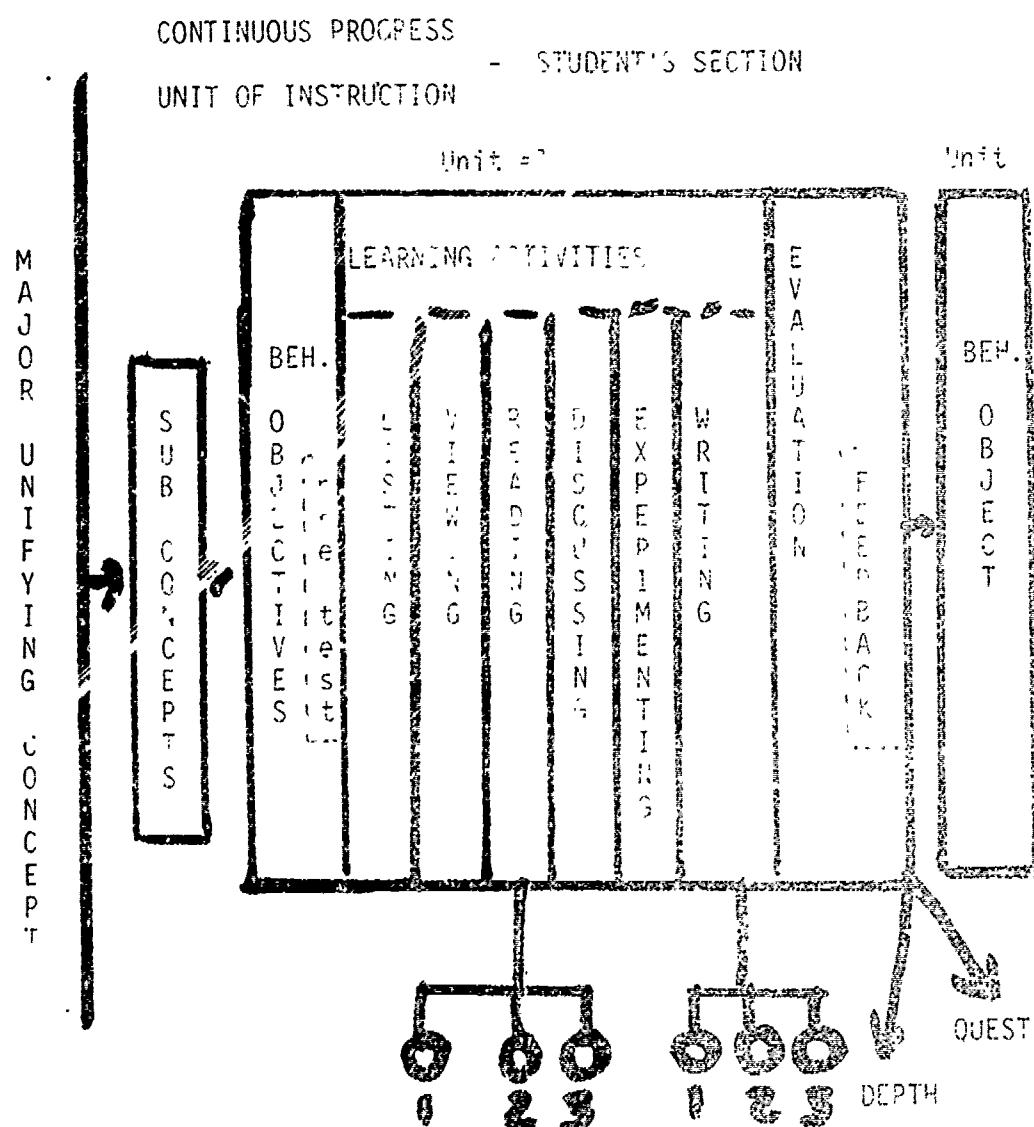
II. How To Write A Unipac

   A. Begin with a concept

   Pick out the single learnable idea, skill. or attitude that
   you want students to achieve and/or build upon.

   Some ideas to help in the selection might be:
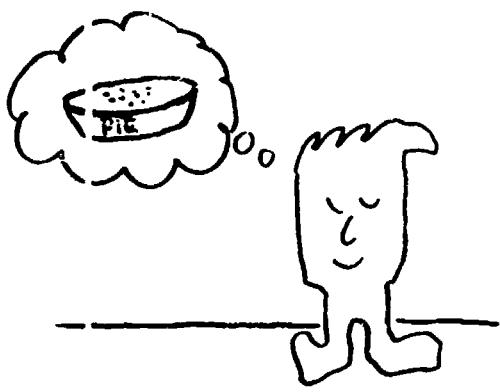
   `. Choose the most important concept you
      wish students to learn.
   2. Choose a concept which builds sequentially
      upon concepts already learned.
   3. Choose the concept your students seem to
      have the most difficulty in learning.
   4. Pick a particular sk ll which you think is
      critical and needs to be developed.
   5. Choose an idea which is not normally
      enlarged upon in the present curriculum
      but which you and/or learners feel has
      merit.

   B. Divide the concept into its more specific components (sub-
       concepts)

   If you want the learner to under-
   stand the concept, what specific
   prerequisites are required to
   build this understanding? That
   is, list those component parts
   which make up the concept which
   you feel are requisite to effec-
   tive mastery of the concept.

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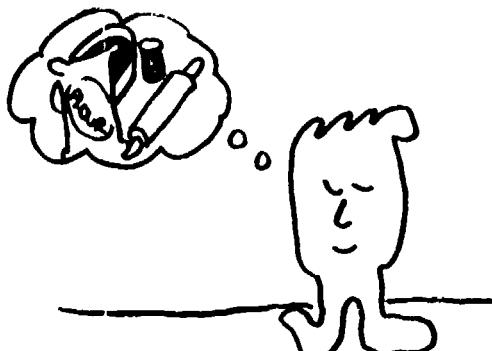
C. Put the objectives in behavioral (performance) terms

  After you have identified what it is you want students to
  learn, proceed to spell out the objectives behaviorally.
  To write a behavioral objective you must answer three ques-
  tions:
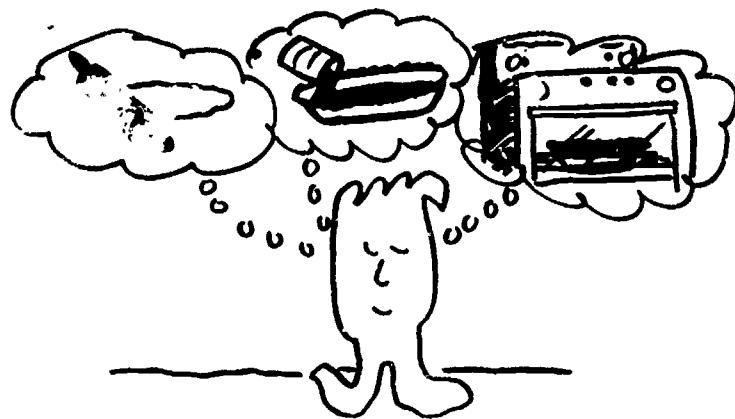
1. What will the learner be doing?
    *(In other words, what will the
    learner be able to do when he is
    performing this objective.)*

2. What conditions will you impose?
    (How will the behavior occur?)

3. How will you recognize success?
    *(You must spell out the performance
    criteria. That is, how accurate
    must the student be when completing
    the objective?)*

  Think of the unipac as a road map. You wish to direct a
  student from one point on the map to another. If you tell
  students exactly what it is you want them to know and then
  test only those items you have indicated, than the success
  criteria of the behavioral objective can be met. The intro-
  duction of the behavioral objective forces a precise delinea-
 tion of what, in many instances, has been very broad and all
  too often ambiguous direction that the learning should take.

  Pupil progress car now be monitored in terms of acquired
  behaviors rather than in terms of activities completed. This
  has obvious advantages to both teacher and student.

  Some excellent sources dealing with developing proficiency
  in writing behavioral objectives are listed in the biblio-
  graphy.

D. Determine appropriate learning activities

    1. This section of the unipac
        should offer many varieties
        of activities so that various
        learning styles can be met.
        The activities should be
        designed to help each stu-
        dent meet the behavioral
        objectives.

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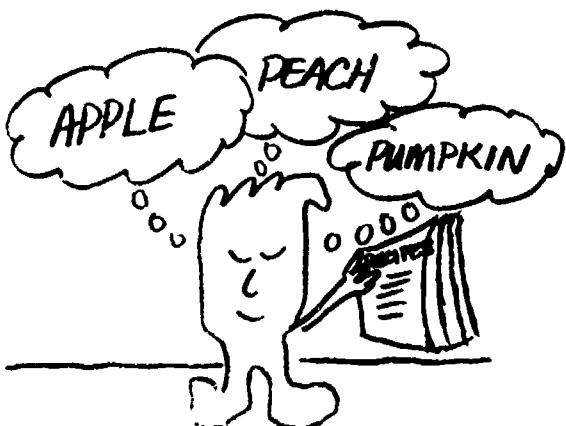
a. Remember that:
   (1) Students vary in their preferences for different sensory modes of learning.
      (a) Aural-oral
      (b) Visual-graphic
      (c) Reading-writing
      (d) Tactile-kinesthetic

   (2) Students vary in their preference for learning independently or learning through social interaction.

   (3) Students vary in the extent to which they are self-directing.

   (4) Students vary in their tolerance for ambiguity.

   (5) Students vary in duration of attention-work span and in distractibility or persistence.

   (6) Students vary from slow-starting to fast-starting

   (7) Students vary in degree and type of creativity.

2. Because developing various dimensions of learning activities is crucial to meeting individual differences in learners, the first task would be to again ask yourself: *"What is it that learners should be able to do as a result of working with this unipac?"* *If students should be able to do such-and-so, what types of activities would be most conducive to that accomplishment?*
   a. How many assignments are needed?

   b. What is the sequence, if any, of those assignments?

   c. How should the assignments vary in accordance with different learning styles?
      (1) in length
      (2) in modes of instruction
      (3) in resources and activities

3. The next step in writing a unipac is to develop lessons for each of the stated objectives.

   a. Each lesson should be written so it can be used individually.

   b. Write directions to the pupil on how to proceed. Be sure the directions are clear, complete, and concise.

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c. Avoid using language that is too difficult for the level at which the unipac will be used. If the student can't read the directions and objectives, he can't be expected to successfully achieve the objectives (although instructions or lessons could be audio-taped which is in line with our need to make materials flexible enough to meet the needs of all students).

d. Use a variety of methodology and media. Try not to tie all learning activities to the printed word. Don't re-write the textbook! Some students learn best by reading, some by discussing, some by viewing, some by experimenting, etc. It takes time and effort to search out many avenues to arriving at the same goal. However, it is necessary if we are truly interested in meeting the various interests and needs of all. Remember also that learners like a variety of methods - it makes learning much more interesting!

e. If you allude to commercially prepared materials for use in the lessons, be sure to give proper credit including title, author, publisher, copyright date, place of publication, and price. Actual quotes over 300 words from commercial materials should only be used after written permission from the publisher is acquired.

f. Don't make the lessons long and cumbersome. Successful completion of a lesson is often motivational. Remember, unipacs by definition are not units or chapters in a textbook; they are designed to teach a single concept. Too often, however, they become bulky from including too much material. Keep them short and simple rather than large and complicated.

g. Finally, identify each lesson by number and title.

4. Build opportunities for self-evaluation into the lessons

a. Methods for learners to engage in self-checking should be provided so learners will know if they are ready for the post-test or should continue working with the learning activities.

b. These self-tests can take many forms (i.e., questions, demonstrations, exercises, construction, etc.), but they should give the learner an indication of whether or not he is ready for the performance required on the post-test. As an example, you might simply list some "sample test questions" in each lesson.

E. Develop depth and/or quest activity suggestions
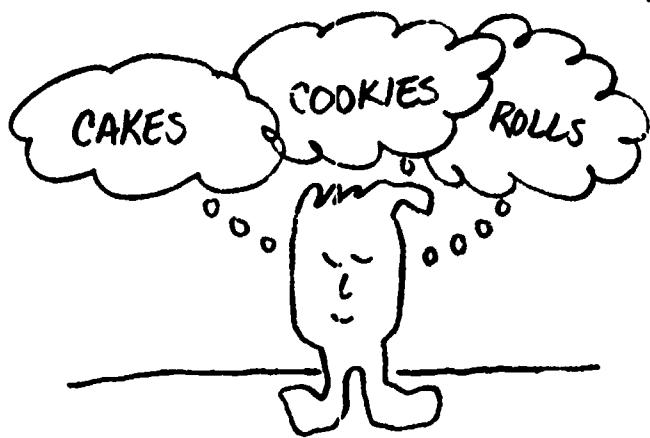
1. Are there items directly related to
the overall idea, skill, or attitude
being developed through use of the
unipac which you feel some students
would benefit through greater <u>in-depth</u>
study? If so, compile a list of
suggestions for inclusion here. Re-
member that this normally carries the
student <u>beyond</u> the limits of the struc-
tured unipac. However, you must answer
some fundamental questions.

a. Are in-depth studies required or
supplementary?
b. If they are required, are they
required of all students?
c. If they are required, to what degree of achievement
are they required?
d. How are they related to further development of the
idea, skill, or attitude under consideration?

So that students clearly understand the intent of in-depth work,
answers to these questions should be contained in this portion
of the unipac.

1. Included with/or instead of in-depth activities, you may
at this point in the unipac wish to simply communicate
to the student that he might pursue any related learning
activity which he finds interesting. Ask him to inform
you of his plans. You might even list a few possible
suggestions for consideration by students. What you are
attempting then, is to motivate students into initiating
their own learning. This is normally referred to as
<u>Quest</u> and is not required of students for completion
of the unipac.

2. In-Depth and/or Quest suggestions could instead be included
at the end of a selected lesson or lessons rather than as
a separate portion of the unipac if you would feel this
to be more advantageous.

F. Develop the Pre-Test and the Post-Test

1. Pre-Test
a. Design the evaluation which
will enable you and the
learner to determine where
the learner is in relation
to the required performance.
That is, is he ready to
begin the unipac? Does he
only need some of the les-
sons? Maybe he needs all
of the lessons. Or more!

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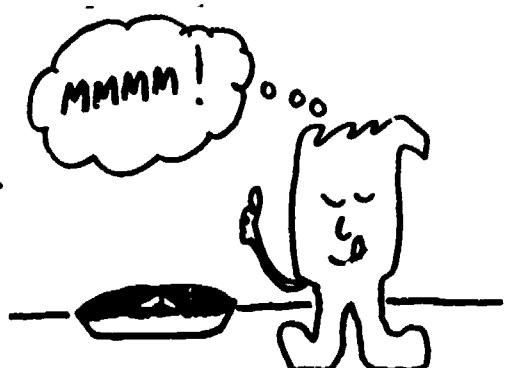
b. The pre-test is constructed for diagnostic and pre-scriptive reasons and, as such, is closely tied to the behavioral objectives.

c. It is most helpful to correlate sections of the pre-test with specific lessons designed to achieve different behavioral objectives. As an example:
   (1) Questions no. 1-4 might relate to lesson no. 1 which is designed to help achieve behavioral objective no. 1.

   (2) Questions no. 5-8 are related to lesson no. 2 which is designed in accordance with performance required to accomplish objective no. 2, etc.

d. Should the learner be successful in the pre-test in meeting the criteria set by the behavioral objectives, he could be excused from entering into the related learning activities. Should he be successful on some, but unsuccessful on others, he would be directed into appropriate learning activities associated with the objectives he has yet to accomplish. Therefore, some students might be doing all of the lessons, some students might be doing only some of the lessons, and some students really have no need to do any of the lessons.

2. Post-Test
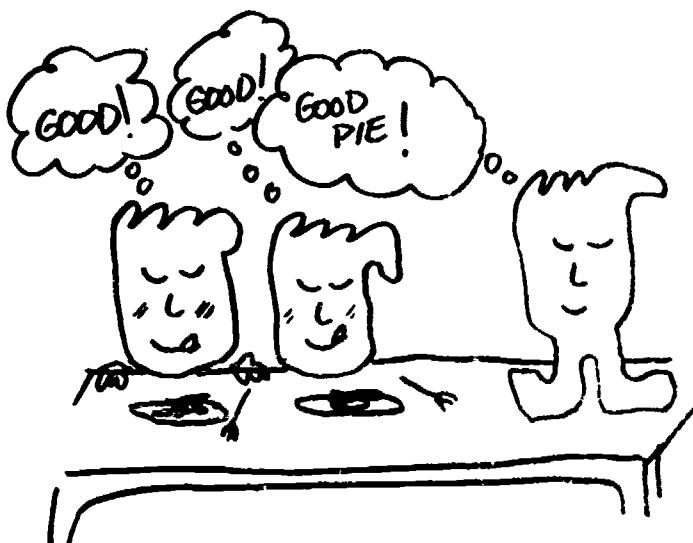
   a. Now develop the methods for a final evaluation of student achievement as it relates to the required behavioral objectives. Again the evaluation must measure what it purports to measure: the behavioral objectives!
      (1) Remember, the evaluation can take any number of forms other than paper and pencil tests. It is performance of mastery of the behavioral objectives which is required.

   b. Should the student not have achieved the necessary performance, the post-test should be used a.   : pre-test was; for diagnostic   prescriptive purposes. The learner can thus be re-cycled into learning activities to ensure eventual accomplishment of the behavioral objectives.

G. Finally, design some Feedback Form for learners to use and include it with the unipac. This could be a simple questionnaire concerning possible strengths and weaknesses of the unipac from the learner's point of view. If you are receptive to their ideas, do not fail to tap this source of information. Then incorporate some of the information given into revising and improving the unipacs.

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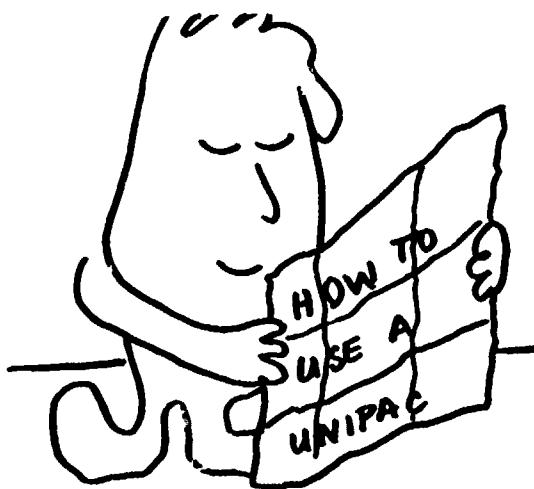
III. HOW TO USE A UNIPAC

I. The unipac provides an explicit organizational scheme under which
the student can operate. However, implementation of unipacs often
requires role changes in teacher activities. Although the roles
of teachers, students, administrators, as well as the community
will be dealt with at length in the next section, what follows
here is an attempt to show things teachers could be doing at dif-
ferent stages in developing expertise in using unipacs with students.

> Methodology of instruction is not our concern in this section.
> Whether the teacher is working with large groups, small groups, or
> individual students in a tutorial setting, we assume the teacher
> is both competent and flexible enough to use the most appropriate
> techniques. We are concerned, however, that teachers are aware of
> their allocation of time and energies in attempting to better
> individualize instruction through the use of unipacs.

What follows then, are three models indicating possible modification
of teacher behavior in developing expertise in this form of instruc-
tion. The items presented are not intended to be inflexible or
entirely definitive, but rather to serve as guides in helping
teachers with the use of unipacs.

THREE MODELS OF USING UNIPACS

BEGINNING MODEL

At the outset a teacher who has not written or used a unipac
decides to use a unipac approach in attempting to individualize
instruction. The following might be considered a minimal list
of task identifiers and desired behaviors for teachers which
will facilitate learning through unipac use.

12

<u>TASKS</u>   Self-Check
                       <u>Accomplished</u>

<u>DESIRED BEHAVIORS</u>

| | | | Not |
| | <u>Yes</u> | <u>No</u> | <u>Approp.</u> |

Obtains   ☐   ☐   ☐   A. Obtains the appropriate unipacs from
                           Dept. Chairman, central office or
                           consortium bank.

Presents   ☐   ☐   ☐   A. Goes over, with the students, a list
                           of available unipacs designed to meet
                           various needs.
                           *1. When introducing UNIPACS to the
                           student for the first time it is
                           essential that the student feels
                           that the unipac is a device which
                           will allow him to:*

                           a. know exactly what is expected
                              of him in terms of learning
                              behavior
                           b. know when he has achieved a
                              learning objective to a satis-
                              factory degree by use of self
                              and post-tests
                           c. be able to get advice and help
                              from his peers and instructor
                              when he desires or needs it
                           d. progress at a rate more commen-
                              surate with his abilities and
                              interests
                           e. become more involved in learning
                              experiences which are most appro-
                              priate to his best learning styles
                           f. receive more individual help from
                              the instructor in learning - but
                              when and how he needs it
                           g. become involved in additional
                              quest opportunities if and when
                              interested in them
                           h. obtain better success in learning
                              due to a more organized approach
                              to instruction which has an effect
                              towards better student and teacher
                              accountability.

13

	TASKS		Self-Check Accomplished		DESIRED BEHAVIORS

TASKS

Self-Check
Accomplished

DESIRED BEHAVIORS

Yes	No	Not Approp.		
☐	☐	☐	B.	HOLDS DISCUSSIONS WITH STUDENTS ON THE "TO THE STUDENT" SECTION OF THE UNIPAC.
☐	☐	☐	C.	Administers the Pre-Test.
☐	☐	☐	D.	Corrects the Pre-Test.
☐	☐	☐	E.	Discusses the implications of the pre-test (general)
☐	☐	☐	F.	Emphasizes the idea of "testing out" and progression commensurate with abilities.

Coordinates

Yes	No	Not Approp.		
☐	☐	☐	A.	Plans for the availability of materials and resources
☐	☐	☐	B.	Sets up a clearly defined time schedule of due dates for certain activities.
☐	☐	☐	C.	Establishes time for some large group or "traditional" class presentations if appropriate.
☐	☐	☐	D.	ASSIGNS STUDENTS TO SMALL GROUPS OR LEARNING TEAMS AND IDENTIFY TIMES OF MEETING.
☐	☐	☐	E.	Establishes a completion date for the unipac.
☐	☐	☐	F.	Defines the grading scales as to components to be measured and how they will be measured. Communicates with students on grading policy.
☐	☐	☐	G.	Sets time for post-test.
☐	☐	☐	H.	Works with students on a cooperative basis assisting them, counseling them; begin to function as a learning diagnostician.
☐	☐	☐	I.	Where necessary leads small groups or learning team meeting.

TASKS				DESIRED BEHAVIORS

<table>
<tr><td></td><td colspan="3">Self-Check
Accomplished</td><td></td><td></td></tr>
<tr><td></td><td>Yes</td><td>No</td><td>Not
Approp.</td><td></td><td></td></tr>
<tr><td>Modifies</td><td>☐</td><td>☐</td><td>☐</td><td>A.</td><td>Where necessary, modifies the unipac so existing resources and facilities can be utilized and there are no disturbing mechanical problems as to books, materials, and media availability.</td></tr>
<tr><td rowspan="5">Evaluates</td><td>☐</td><td>☐</td><td>☐</td><td>A.</td><td>Administers in-process tests.</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>B.</td><td>Administers post-test.</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>C.</td><td>Interprets scores on post-test.</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>D.</td><td>Assigns grades to students.</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>E.</td><td>Evaluates the degree of success of student learning when using unipacs as an organizational learning tool.</td></tr>
<tr><td>Creates</td><td>☐</td><td>☐</td><td>☐</td><td>A.</td><td>Prepares additional unipacs in accordance with student needs.</td></tr>
</table>
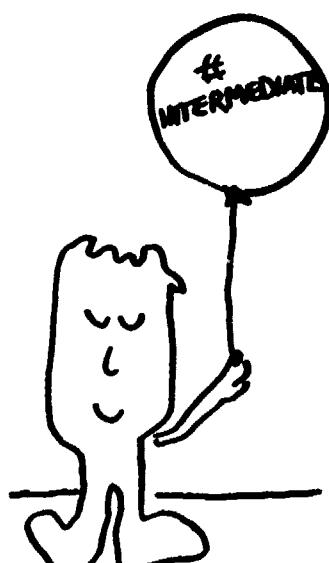
INTERMEDIATE MODEL

If we assume that the teacher has had some success with unipacs and possibly has created his or her own unipac, or has used enough of them to be well oriented, the new model will show some changes. Focus will be on the area of change rather than all of the needed behaviors.

DESIRED BEHAVIORS

<table>
<tr><td></td><td colspan="3">Self-Check
Accomplished</td><td></td><td></td></tr>
<tr><td></td><td>Yes</td><td>No</td><td>Not
Approp.</td><td></td><td></td></tr>
<tr><td>Obtains</td><td>☐</td><td>☐</td><td>☐</td><td>A.</td><td>Has available a selection of unipacs which span considerable materials and traditional time allocations.</td></tr>
</table>

15

TASKS   DESIRED BEHAVIORS

                        Self-Check
                        Accomplished

                                 Not
                    Yes   No   Approp.

Team Member   ☐   ☐   ☐   A. Assists students in selecting the unipac
                                             to use based on a cooperative (individual
                                             student and teacher) examination of pre-
                                             test or composite record from previous
                                             performances

                    ☐   ☐   ☐   B. Involves members of other departments
                                             when appropriate.

                    ☐   ☐   ☐   C. Works with administrators in establishing
                                             positive policy toward using community
                                             resources.

Coordinates   ☐   ☐   ☐   A. Assists students in setting attainable
                                             goals.

                    ☐   ☐   ☐   B. Establishes a contractual or specific set
                                             of objectives either within a unipac
                                             or a set of unipacs for each student.
                                             (This implies that each student will
                                             be working at his or her own rate.)

                    ☐   ☐   ☐   C. Assesses the range of activities and plans
                                             to have the required materials and media
                                             available. This is a much more elaborate
                                             task than before.

                    ☐   ☐   ☐   D. Works with administrator in changing both
                                             individual student and group schedules
                                             when it would facilitate learning.

                    ☐   ☐   ☐   E. Recognizes that the room being used can
                                             be made flexible and more suited to
                                             learning if you permit change in the
                                             physical arrangement. e.g. small group
                                             cluster, tables for learning group dis-
                                             cussions, areas for resource work, and a
                                             place for teacher conferences.

16

TASKS   DESIRED BEHAVIORS

                    Self-Check
                    Accomplished

                              Not
              Yes   No   Approp.

Evaluates   □   □   □   A.   In addition to the duties previously
                                          suggested the teacher should begin to
                                          build evaluations of each student in
                                          the following areas:

                                               Intensity of motivation
                                               Interest area and type
                                               Prefered mode of learning
                                               Attention span
                                               Tolerance for ambiguities
                                               Degree of creativity
                                               Scholastic aptitude
                                               Reading level

              □   □   □   B.   From the foregoing evaluations the
                                          teacher should begin to build an actual
                                          profile of the student. It is suggested
                                          that the items included in the profile
                                          be of such a nature that the student can
                                          share the profile without having the
                                          teacher feel that there has been a
                                          breach of professional ethics.

                              THE MATURE MODEL

The last model suggests a move toward self-initiated learning.
The student becomes more responsible for his own learning. The
selection of goals and objectives and the design of learning
activities become the province of the student. The student
is encouraged to design his own evaluatory experiences.

MATURE

The para professional and teacher aide become even more im-
portant in charting student progress and in giving logistic
support. Charts of progress, contract records, student
profiles, attendance, back-scheduling, all fall in their
domain.
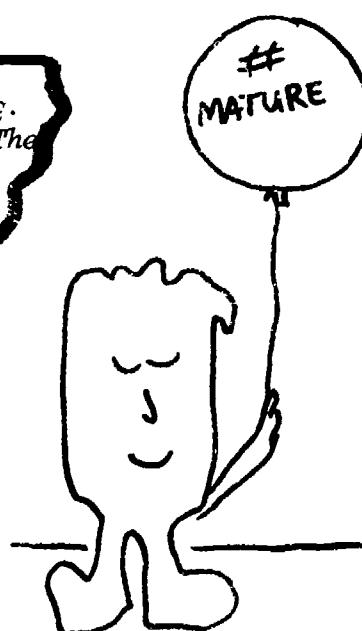
TASKS   DESIRED BEHAVIORS

                    Self-Check
                    Accomplished

                              Not
              Yes   No   Approp.

Evaluates As [ ]   [ ]   [ ]   A. Assists student in identifying objectives
A Member Of   and planning learning activities to
A Team   accomplish these objectives through
                                     direct consultation in which the teacher
                                     serves as inspiration and motivating force
                                     through professional command and knowledge
                                     of the subject.

              [ ]   [ ]   [ ]   B. Assists student in producing evaluatory
                                     experiences.

              [ ]   [ ]   [ ]   C. Uses profile with the student to
                                     establish goals, levels, and extent
                                     of attainment.

Coordinates   [ ]   [ ]   [ ]   A. When the above points are accomplished,
                                     clearly spells out the contract to a
                                     para-professional who will now
                                     become the tester and record keeper.

              [ ]   [ ]   [ ]   B. At this time it is presumed that
                                     having gone through the intermediate
                                     stage, the teacher will have solved
                                     some of the logistics of storage and
                                     dissemination of unipacs and materials.

Creates   [ ]   [ ]   [ ]   A. Designs pre-tests for entrance to the
                                     discipline or level. These pre-tests
                                     should clearly test behaviors pre-
                                     requisite to satisfactory performance
                                     in the a...

              [ ]   [ ]   [ ]   B. Produces a comprehensive post-test
                                     for the area or discipline. This
                                     post-test can also be used as a
                                     means for "test out" of an area or
                                     subject.

              [ ]   [ ]   [ ]   C. Creates single concept unipacs on
                                     advanced topics.

              [ ]   [ ]   [ ]   D. Produces and executes mini courses

18

IV. ROLES
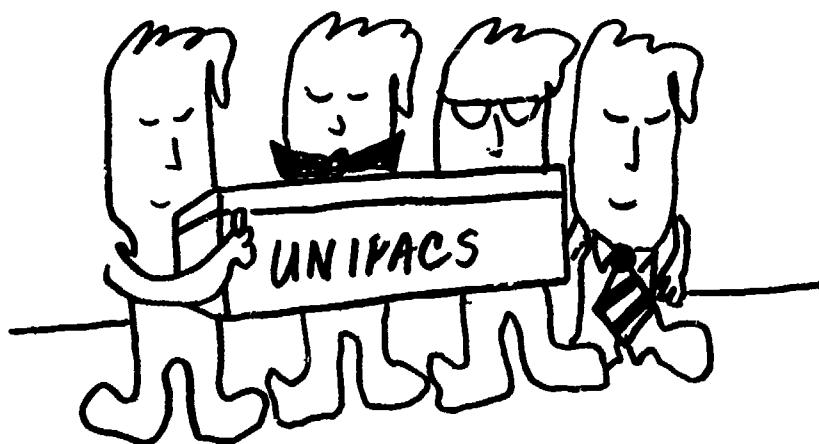
In implementing the type of program mentioned thus far, serious consideration must be given to the modification of Roles of the various segments which comprise the school setting.

The following section represents an attempt to outline the functional roles of the teacher, student, administrator, and community which are felt most helpful in the successful operation of this program.

The identified functions will serve as guide to interested users of this booklet. It is suggested that the guides for the following roles are not intended to be completely definitive and should be flexible enough to meet various needs which will arise.
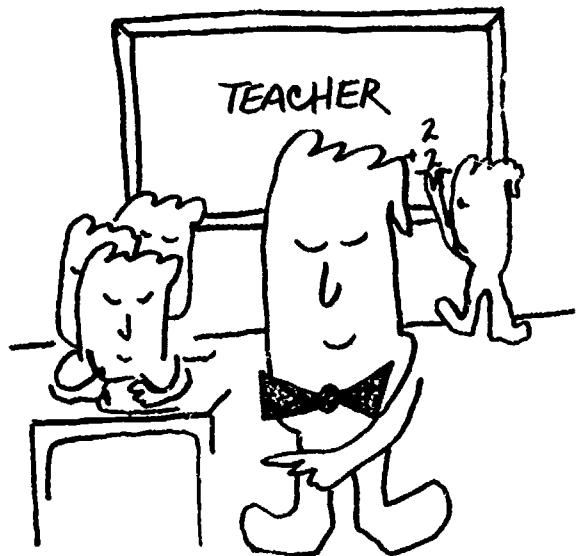
I. TEACHER

The teacher is the key figure in the education-1 program. In order to successfully implement programs of the future, teachers will need to develop new competencies and satisfactions as their roles in working with learners change. The teacher's role will be that of an expert diagnostic decision-maker. In a large sense, the teacher's role includes three types of responsibility - identification, guidance, and evaluation.

IDENTIFICATION

In the changing role of the educator, an emphasis on identification of learner needs becomes highly important. The teacher must quickly and skillfully involve students in appropriate learning activities. There is need for an articulated sequence of activities or tests to aid in this. Such activities may well include situations in which the student is provided with stimuli that encourage free discussion so the student may eventually formulate his own objectives and construct his own learning activities. Because of past experience and training, the teacher is able to pick out relevant comments related to the student's previous experiences. Selective use of pre-tests at the beginning of a learning experience may enhance the professional judgement of the teacher as he helps decide what learning events are appropriate for which students or groups of students.

GUIDANCE

As students go through their learning experiences, the teacher watches for changed behaviors. Frustration, triumph, boredom, anxiety, fatigue, or low self-esteem in individual students are signals to modify intervention. Periodically the teacher checks on student progress, recognizing that learning is highly individualized and personal. Figuratively, the teacher walks beside the student, providing encouragement as a partner in learning.

EVALUATION

When a teacher observes in students those behaviors that were identified as goals, he institutes an appraisal activity. This is a specific learning situation in which the student is called upon to demonstrate a specific skill or procedure. Using this objective evidence, the teacher again has a basis for helping to decide what learning experiences are appropriate. Many students will be ready for new experiences. They may be directed toward new goals. Alternative experiences are then employed to redirect thus far unsuccessful students toward previous goals which they have not yet attained.

THE CHANGING ROLE OF THE TEACHER SUGGESTS A SERIES OF KEY IDEAS, FOR
EXAMPLE:

THE DIRECT TRANSMISSION OF INFORMATION ABOUT THE SUBJECT MATTER TO STU-
DENTS WILL AND SHOULD BECOME A PROGRESSIVELY LESS IMPORTANT PART OF THE
TEACHER'S ROLE. THAT IS, THE TEACHER'S ROLE IS CHANGING MORE TO THAT
OF A RESOURCE PERSON RATHER THAN THAT OF A CONVEYOR OF FACTS AND INFOR-
MATION.

A GREATLY INCREASED PART OF THE TEACHER'S TIME AND EFFORT MUST BE SPENT
IN HELPING STUDENTS ESTABLISH AND UNDERSTAND THEIR GOALS AND OBJECTIVES
AND ESPECIALLY IN HELPING STUDENTS RECOGNIZE THE EFFECT THAT VARIOUS
COURSES OF ACTION HAVE IN REACHING THESE GOALS. THIS WILL OCCUR AS THE
TEACHER BECOMES MORE EXPERIENCED WITH THE CONSTRUCTION AND USE OF UNIPACS.

THE SELECTION OF INSTRUCTIONAL EQUIPMENT AND MATERIALS IN THE FUTURE WILL
BECOME A LARGER PART OF THE TEACHER'S ROLE, BOTH IN INTELLECTUAL EFFORT
AND IN TIME SPENT. A PART OF THE TEACHER'S ROLE IS A RESPONSIBILITY
TO IDENTIFY APPROPRIATE RESOURCES TO MEET LEARNER NEEDS. THE TEACHER
MUST ACCEPT RESPONSIBILITY OF COMMUNICATING WITH THE ADMINISTRATORS
AS TO WHAT RESOURCES ARE NECESSARY IN MEETING INDIVIDUAL NEEDS.

TEACHING WILL AND SHOULD BECOME MORE OF A COOPERATIVE EFFORT BETWEEN
TEACHER AND LEARNER RATHER THAN MOSTLY A TEACHER-DOMINATED SITUATION.

EVALUATION OF SPECIFIC STUDENT ACHIEVEMENT AND ANALYSIS OF THE TEACHING-
LEARNING PROCESS WILL AND SHOULD BECOME AN INCREASINGLY CENTRAL PART OF
THE TEACHER'S ROLE.

THE MAINTENANCE OF PROFESSIONAL COMPETENCE IN BECOMING DESIGNERS RATHER
THAN ADAPTORS OF THE EDUCATIONAL PROCESS WILL AND SHOULD BECOME A BUILT-
IN PART OF THE TEACHER'S ROLE.

IN AFFECTING THE ATTITUDES AND BEHAVIORS OF SELF-DIRECTED LEARNERS, AN
INTEGRAL PART OF THE TEACHER'S ROLE MUST BE TO EXHIBIT POSITIVE ATTITUDES
AND BEHAVIORS IN ALL RELATIONSHIPS WITH STUDENTS.

WITH OTHER EDUCATORS, THE TEACHER SHARES THE RESPONSIBILITY FOR HELPING
EACH STUDENT FEEL SOME CONTROL OVER HIS OWN DESTINY. THE TEACHER WORKS
MORE WITH INDIVIDUALS THAN LARGE GROUPS OF STUDENTS.

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ROLES

The following represent roles of teachers desirable in implementing the preceding:

ROLES					FUNCTIONS

Check List Accomplished

THE TEACHER . . .

ROLES	Yes	No	Not Approp.		FUNCTIONS
Presenter	☐	☐	☐	A.	Presents goals, activities, objectives, tests, pre-tests, in the form of unipacs for the student.
	☐	☐	☐	B.	Presents enrichment material in a variety of ways e.g. lecture, slides, tapes, films, posters, reading, quest packets.
Modifier	☐	☐	☐	A.	Modifies existing unipacs to better fit the resources and student needs of a particular school.
Creator	☐	☐	☐	A.	Creates unipacs to exploit all available resources and to lead to an eventual self-initiated learning program for students.
Discovery Guide	☐	☐	☐	A.	Through continual professional improvement must provide enough knowledge to introduce a student to an area which will stimulate the need for knowing on the student's part.
Team Member	☐	☐	☐	A.	Constantly recognizes his role as part of the learning team. *Whether on a one to one basis with the student in resolving learning problems; or in a larger sense with all of the students in planning or presenting; or with other staff members in multi-disciplinery efforts, the teacher must remain accessable to students even though the unipac presumes individual effort.*
Evaluator	☐	☐	☐	A.	Evaluates self, students, and the learning environment in promoting learning.

ROLES

FUNCTIONS

Check List
Accomplished

THE TEACHER . . .

	Yes	No	Not Approp.
	☐	☐	☐

B. Serves an an evaluation consultant to students.
1. What does your past learning indicate for new progress?
2. What does your attainment on unipacs indicate for further progress?
3. When are you through with this unipac?
4. What are the next areas to explore?

Coordinator ☐ ☐ ☐

A. Plans for the availability of materials and resources so that they may be expeditiously used by students. This may mean scheduling a large group for a specific purpose <u>or reorganizing time</u>, <u>use of facilities, or student schedules</u> so that learning can be optimized.

Decision Maker ☐ ☐ ☐

A. Is constantly involved in decision making to carry out the roles described. This skill must evolve as self-initiated learning is developed more full;. The teacher becomes more of a stage-setter for learning but this involves making many decisions based upon professional judgement.
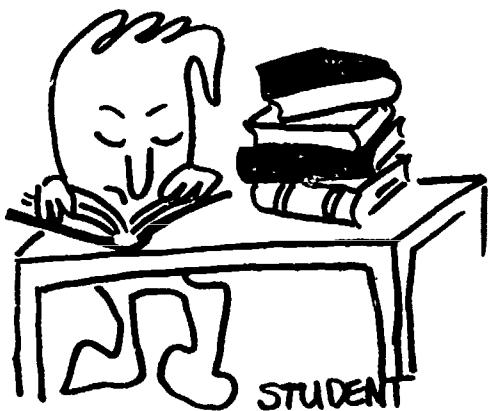
II. STUDENT

If the student is to gain from experiences in education, he must see a link between his own life and education. He must question the relationship of his experiences as a Human Being to his experiences as a student in the laboratory or classroom. Seeking this relationship should begin with the very young child and continue with increasing depth as the student progresses through school. Learning will be at its best when the student himself initiates action and interprets the results of his experience. With expanded freedom for initiation or interpretation the student becomes less dependent on the teacher. He has greater insight into both the question and the answer he seeks because they represent his action.

Learning is an event analogous to a collision between the student and the structure of the subject. This collision will have its greatest impact when there is a readiness on the part of the student to meet the subject matter. As the "engineer" of the collision the teacher assists in identifying the student's readiness or the lack of it. He takes an inventory of the student's past experiences that are relevant to the structure of the course he is undertaking. The student's past experience limits the extent to which any present experience will be meaningful.

Relevance and responsibility in his encounter with reality are inescapable requirements for a student's learning. The smaller the base of experience, the longer the time before the student can accept the responsibility for directing his own actions. *The challenge then is to provide a series of experiences that will enable the student to enlarge his base of knowledge and improve his ability to accept the RESPONSIBILITY for initiating action and interpreting its results.* If an experience is appropriate, the student will find an experience relevant. If he is not ready to act on it, then the expected learning is largely diminished and the appropriateness of this experience must be questioned. *The unipac provides for this changing role of the student.*

The student must have an opportunity to seek questions as well as answers. The learner needs to develop skills which will allow him to identify problems and to find resources appropriate for the solving of these problems. He becomes the creator of his own learning as he synthesizes the interpretation of his own learning activities.

The following represent roles of learners desirable in implementing the preceding:

ROLES   FUNCTIONS

                    Check List
                    Accomplished   *THE STUDENT . . . .*

                          Not
                Yes   No Approp.

Learner   ☐   ☐   ☐   A. Acquires concepts and attitudes through
                                        the use of a wide range of experiences.

Selector   ☐   ☐   ☐   A. Selects goals presented and chooses
                                        activities in which he will participate.

Investigator   ☐   ☐   ☐   A. Plans activities directed toward
                                        answering what and why.

Designer   ☐   ☐   ☐   A. Designs the activities in which he
                                        will participate and develops his
                                        own time scale.

Identifier   ☐   ☐   ☐   A. Identifies the goals he wishes to
                                        reach so that he may design the
                                        activities best suited to him to
                                        reach those goals.

Helper   ☐   ☐   ☐   A. Assists others in reaching their goals
                                        whether it be by one to one assistance
                                        or as a member of a group learning team.

Evaluator   ☐   ☐   ☐   A. Evaluates both himself and his learning
                                        experiences.

Decision Maker ☐   ☐   ☐   A. Makes decisions at every level of
                                        functioning. (As time goes on the
                                        decisions become more complex and
                                        meaningful. At the ultimate point of
                                        graduation the student would be com-
                                        fortable in making most of the deci-
                                        sions in his life.)

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26
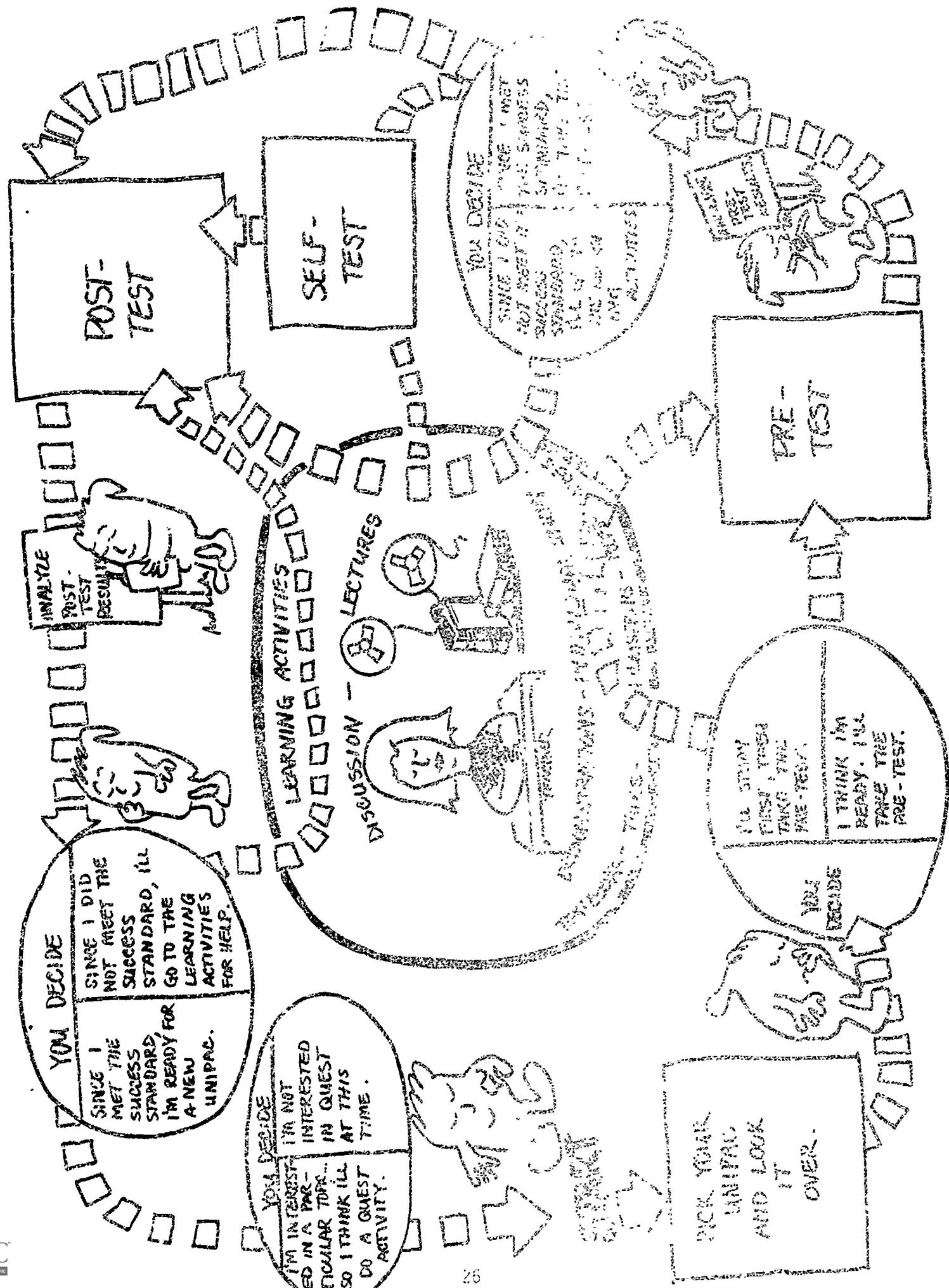
III. ADMINISTRATOR

Adequate leadership is the most important pre-requisite of managed change. Someone at a high administrative level must perceive that innovation and change are desirable. Yet, establishing executive support is only one of the leadership functions. It is also necessary to create and refine ideas, initiate and implement specific innovations, and appraise the effectiveness of the changes. Each of these activities requires leadership and is an integral part of the leadership function.

ADMINISTRATION

More specifically, administrative leadership will:

1. Provide teachers and students opportunities to initiate and carry out appropriate learning activities.

2. Encourage experimentation on the part of staff.

3. Provide an environment for flexibility in time and resources to meet various needs.

4. Provide means to link the school and the community.

5. Utilize strengths of staff members through differentiation of roles and responsibilities.

6. Provide sound pre-service and in-service education programs to insure or assure success.

7. Gain support for the school and program through successful utilization of a well-conceived public relations program.

Following are some of the functions of administrators deemed desirable in helping develop the program thus far described:

ROLES   FUNCTIONS

                    Check List
                    Accomplished
                                                       THE ADMINISTRATOR . . .

                              Not
             Yes   No   Approp.

Organizer   ☐   ☐   ☐   A. Defines roles and structures environ-
                                         ment to facilitate productive program.

Developer   ☐   ☐   ☐   A. Plans appropriate workshops or in-
                                         service programs encompassing
                                         1. The development and use of unipacs
                                         2. The identification of and curricular
                                             supporting continuous progress

Expediter   ☐   ☐   ☐   A. Facilitates program development through
                                         continual involvement

             ☐   ☐   ☐   B. Gives evidence of commitment to
                                         1. unipacs
                                         2. self-initiated learning
                                         3. continuous progress
                                         4. for improvement

             ☐   ☐   ☐   C. Provides for the proper balance between
                                         the change and the existing school pro-
                                         grams.

             ☐   ☐   ☐   D. Specifies the extent of commitment
                                         for unipacs in personnel, time and
                                         faculty allocations.

             ☐   ☐   ☐   E. Recognizes and supports interaction
                                         among students, teachers, and self.

             ☐   ☐   ☐   F. Fosters meaningful communication
                                         between school and community.

Diagnostician ☐   ☐   ☐   A. Cooperates in the analysis of program
Prescriber   progress, and devises and implements
                                         procedures to improve program effective-
                                         ness.

28

ROLES

FUNCTIONS

Check List
Accomplished

THE ADMINISTRATOR . . .

	Yes	No	Not Approp.
Resource Person	☐	☐	☐

A. Provides necessary human and material resources.

| Evaluator | ☐ | ☐ | ☐ |

A. Provides the necessary strategy for evaluating the use of unipacs.

| Community Liaison | ☐ | ☐ | ☐ |

A. Fosters community activities which will lead to total awareness of the nature of unipacs as a learning device and the implication unipacs foreshadow.

ROLES

IV. COMMUNITY

The nature of any educational enterprise, when viewed as a whole, is obviously dependent upon the nature of the society that supports it.

COMMUNITY

The role of the community then is not only to provide the monetary resources to carry out the program initiated by the educational institution but also to act as a resource for that learning. The community should:

1. Support programs undertaken.

2. Insist upon qualified leadership to provide operational efficiency and effectiveness.

3. Devote time and effort through membership on committees to improve school environments.

4. Contribute suggestions for the improvement and development of the curriculum.

The following represent functional roles of the community desirable in support of the above statements:

COMMUNITY ROLES

ROLES

Check List
Accomplished

FUNCTIONS

THE COMMUNITY GAINS A BETTER UNDERSTANDING OF THE SCHOOL AND PROGRAM AS IT . . .

	Yes	No	Not Approp.		
Learner	☐	☐	☐	A.	Participates in study groups sponsored by various community organizations.

	ROLES	Check List Accomplished			FUNCTIONS

<table>
<tr><td></td><td></td><td colspan="3">Check List
Accomplished</td><td>FUNCTIONS</td></tr>
<tr><td></td><td></td><td>Yes</td><td>No</td><td>Not
Approp.</td><td><i>THE COMMUNITY GAINS A BETTER UNDER-
STANDING OF THE SCHOOL AND PROGRAM
AS IT . . .</i></td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>B. Uses resource people and studies results
and materials supplied by the administra-
tion concerning unipacs and their impli-
cations.</td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>C. Reads, listens, and reacts to materials
on unipacs which are made available by
the board of education.</td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>D. Obtains materials on self-initiated
learning and evaluates these as an
eventual outcome of unipac instruction.</td></tr>
<tr><td></td><td>Communicator</td><td>☐</td><td>☐</td><td>☐</td><td>A. Supports a channel of communication
with the school.</td></tr>
<tr><td></td><td>Participant</td><td>☐</td><td>☐</td><td>☐</td><td>A. <i>Opens doors of business, industry,
institutions, and people so that the
community becomes a resource for stu-
dents.</i></td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>B. Develops with the board, a realistic
policy toward the use of the community
for "hands on learning".</td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>C. Joins the school staff as para-profes-
sionals to assist in the use of unipacs.</td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>D. Feeds back information to the profes-
sional staff to assist in modifying
existing unipacs or creating new ones.</td></tr>
<tr><td></td><td></td><td>☐</td><td>☐</td><td>☐</td><td>E. Serves on an advisory council including
community leaders, administrators,
students, and teachers to give further
input into appropriate program develop-
ment.</td></tr>
</table>

V CONCERNS

Any program in education today has certain inherent concerns and questions of which teachers and administrators must be aware. It is important that alternative solutions be available to as many of these questions as possible. The purpose of this section is to identify concerns, cite specific questions related to those concerns, and outline general <u>alternative answers</u> to the questions that a teacher or administrator might use in solving the concerns. Hopefully teachers and administrators will be able to utilize this section to identify questions and have suggested alternative answers for them.

It should be recognized at this point in time, that the use of unipacs, because they are change oriented, are going to surface some specific concerns. These concerns need to be dealt with in an orderly and productive fashion. Among these (to illustrate) would be:

> The role of the teacher
> The mechanics of operation
> The development of the curriculum
> The role of the student
> The use of time and facilities
> The impact on the community

It is implied that the alternative solutions presented may be used either individually or in concert with others in helping readers achieve what is best for their situation.

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I. THE ROLE OF THE TEACHER:
   A. HOW DO TEACHERS ACCOMPLISH ROLE CHANGE?

      1. Alternative - In-service devoted to philosophy of teacher
                       methodology in using unipacs.
      2. Alternative - Use special resource personnel - reading
                       consultant, AV consultant, IMC.
      3. Alternative - Organize in teams with at least one member
                       with experience and commitment.
      4. Alternative - Read material on subject.
      5. Alternative - Visitation where program is in progress.
      6. Alternative - Teachers use check list to guard against
                       misuse of time (i.e. always lecturing, etc.)

   B. HOW CAN TEACHERS HANDLE THE SHIFT IN MOTIVATION IF SELF-
      LEARNING TAKES AWAY COMPARISONS OF STUDENT PROGRESS?

      1. Alternative - Flow chart of unipacs completed.
      2. Alternative - Compare success in each unipac evaluation.
      3. Alternative - Offer alternative motivation - early com-
                       pletion - released time - possibilities of
                       quest and enrichment activities.
      4. Alternative - In conference let student know he is being
                       evaluated according to progress in completing
                       the objectives rather than in comparison to
                       how someone else completed them.

   C. WHAT TECHNIQUES CAN TEACHERS USE TO HELP STUDENTS HAVING
      DIFFICULTY?

      1. Alternative - Use student assistants to help.
      2. Alternative - Have open lab available and schedule in students
                       having difficulty.
      3. Alternative - Use tapes, slides, films to reinforce concept.
                       Student can repeat them many times. Use
                       worksheets for best results.
      4. Alternative - Group students within class structure.
      5. Alternative - Form learning teams and use paired-learning
                       techniques.
      6. Alternative - Use class tutorials.

   D. HOW CAN TEACHERS MAKE UNIPACS MORE HUMANIZING?

      1. Alternative - Design learning activities with discussion
                       built in.
      2. Alternative - Suggest group projects for quest and enrichment.
                       i.e. ecology, etc.
      3. Alternative - Allow group discussion through class organization.
      4. Alternative - Use paired learning techniques, etc.

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II.   THE MECHANICS OF OPERATION:
      A. HOW CAN ATTENDANCE BE HANDLED IN THIS PROGRAM?

          1. Alternative - Require attendance unless teacher release for
                            1) remedial help or 2) other individual work or
                            3) accelerated student or 4) AV or consultant
                            help.
          2. Alternative - Eliminate time requirements.
          3. Alterrative - Open campus, or work-study program.
          4. Alternative - Optional attendance.

      B. WHAT HAPPENS WHEN A STUDENT FINISHES PRIOR TO SCHEDULED TIME?

          1. Alternative - Use to help other students.
          2. Alternative - If possible release for other pursuits.
          3. Alternative - Guide into quest and enrichment activities -
                            i.e. writing own unipacs, making film presentation.
          4. Alternative - Have advanced unipacs developed for this type
                            of student.
          5. Alternative - Start new course - i.e. Algebra I finished he goes
                            to Al..bra II or Geometry (develop continuous
                            progress curriculum).

      C. HOW ARE UNIPAC SCORES CONVERTED TO GRADES OF A-F?

          1. Alternative - Completion of all unipacs - A.
          2. Alternative - % of performance on unipac ABC.
          3. Alternative - Completion of all unipacs - B, extra A.
          4. Alternative - Failure to do all unipacs if until such time as
                            they are completed.
          5. Alternative - No fail - if student completes all unipacs he gets
                            an M (mastery) - less than this will result in a
                            print out which lists objectives students have
                            completed.
          6. Alternative - ABC no-record.

III. THE DEVELOPMENT OF THE CURRICULUM:
      A. WHAT CONCERNS ARE THERE IN CURRICULUM COORDINATION?

          1. Alternative - Develop K-12 curriculum based on concepts and
                            objectives.
          2. Alternative - Use pre-requisite course objectives.
          3. Alternative - Have articulation with levels above and below.
          4. Alternative - Use pretest to determine student location in the
                            course and then proceed.

B. HOW MAY CREDITS BE AWARDED WITH THIS PROGRAM?

1. Alternative - Be prepar d to allow course work to continue after
   semester ends - home study, summer school, or
   contracts.
2. Alternative - Time becomes the variable - course may last longer
   than one year.
3. Alternative - Course credit granted on completion of objectives
   rather than time.
4. Alternative - Partial credit (suggested full or half).
5. Alternative - Credit granted when finished - regardless of time.
6. Alternative - Alternative for gaining credit (summer school
   extra course etc.)
7. Alternative - Elimination of credit requirement.

C. HOW ARE UNIPACS WRITTEN?

1. Alternative - See section IV of this book.
2. Alternative - See bibliography section of this book.

IV. THE ROLE OF THE STUDENT:
   A. HOW CAN STUDENTS BE PREVENTED FROM WASTING TIME?

1. Alternative - Use contracts which include completion dates
   and check points.
2. Alternative - Involve guidance department.
3. Alternative - Have students work as a team.
4. Alternative - Establish check date for parent conference.
5. Alternative - Circulate in class and show interest and help.
6. Alternative - Offer incentive for early completion - i.e. release
   from class.
7. Alternative - Students may waste some time - teachers should
   recognize that all students waste time and should
   not get up-tight about it.
8. Alternative - Have stude t check list of tasks to perform, set
   their own deadlines. and hold them accountable.

   B. HOW CAN STUDENT CREATIVITY BE DEVELOPED THROUGH USE OF UNIPACS?

1. Alternative - Use open ended unipacs where students can be truly
   creative
2. Alternative - Allow students to write their own.
3. Alternative - Quest and enrichment activities such as projects,
   slide presentations etc. in subject areas not
   using unipacs but to which student has an interest.

C. HOW CAN STUDENT STUDY HABITS BE IMPROVED THROUGH USE OF UNIPACS?

1. Alternative - Design unipacs to include skill improvement as an integral part of the material in the unipac.
2. Alternative - Use a variety of learning activities - tapes, films, etc.
3. Alternative - Use student aide - promote use of learning teams with students helping students.
4. Alternative - Have special program with counselor etc. to work in this area.
5. Alternative - Work with parents.
6. Alternative - Develop a plan with the student to help him improve his study habits.
7. Alternative - Use constant check points and communicate these to students.

D. WHAT HAPPENS WHEN THE STUDENT HAS NOT COMPLETED THE UNIPACS BY THE END OF THE GRADING PERIOD?

1. Alternative - Give student Incomplete until such time as he finishes. i.e. home study, summer school and contract.
2. Alternative - Tabulate % of unipacs done and assess credit.
3. Alternative - Give partial credit, i.e. 1/4, 1/2, 3/4.
4. Alternative - No fail - if student completes all unipacs he gets an M (mastery) - less than this will result in a print out which lists objectives student has completed.
5. Alternative - Take course the following year.

E. HOW CAN STUDENTS GET INDIVIDUAL HELP?

1. Alternative - Student aides.
2. Alternative - Open labs - back schedule.
3. Alternative - Concepts or films etc.
4. Alternative - Schedule individual conferences.
5. Alternative - Have several teachers equipped to help.
6. Alternative - Re-allocate class time to insure student does receive individual help.
7. Alternative - Use paired-learning technique.

F. HOW ARE THE VAST AMOUNTS OF UNIPAC MATERIAL DISTRIBUTED?

1. Alternative - Unipacs stored in testing center, open lab, or area in library and picked up by students or distributed by aide.
2. Alternative - Have filed in pigeon hole file so students can pick up their own.
3. Alternative - Place all unipacs for a course in a folder or notebook and give to students.
4. Alternative - Upon successful completion of one unipac, hand student the next one in the continuum.

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G. HOW ARE RECORDS KEPT CURRENT?

1. Alternative - Have forms in three or four ply pressure sensitive paper so records will not have to be repeated.
2. Alternative - Up-date records often so there isn't a backlog.
3. Alternative - Use para-professionals if available.
4. Alternative - Record date on all records.
5. Alternative - Use wall chart so that students can see relative position. (See example. section VI)

V. THE USE OF TIME AND FACILITIES:
A. HOW DOES THE PROGRAM AFFECT SCHEDULE AND ROOM UTILIZATION?

1. Alternative - Schedule sections together if possible into attached rooms - assign to block and allow teachers to manipulate.
2. Alternative - Build in team planning time - might have to shorten school day.
3. Alternative - Attempt to provide open lab and testing center - i.e. section of library or separate rooms if possible.
4. Alternative - Students should be provided with unscheduled time (release from study hall in traditional scheduling).
5. Alternative - Look at modular or block scheduling.

B. WHERE WILL TEACHERS FIND TIME TO DEVELOP UNIPACS?

1. Alternative - Apply for summer curricular work.
2. Alternative - Use team approach to share responsibility.
3. Alternative - Use aides etc. for much of the clerical work.
4. Alternative - Organize material for easy dissemination to save time and interruption.
5. Alternative - Make use of models already available.
6. Alternative - Let advance students help.

C. HOW WILL STUDENT NON-COMPLETION OF COURSE REQUIREMENTS AFFECT THE SCHEDULE?

1. Alternative - Contract to finish and take regular schedule.
2. Alternative - Don't consider the time element. Course may run two years consecutively - then move into another course.
3. Alternative - Schedule teacher across courses.
4. Alternative - Have modular or block schedule.

D. WHAT PHYSICAL CHANGES WILL BE NECESSARY IN THE CLASSROOM?

1. Alternative - Divide seats in classroom to separate work area from tutorial area, with free movement between the two.
2. Alternative - Have all testing done in testing center, open lab, or IMC (if possible).

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3. Alternative - If several sections of same class are scheduled, have one room for testing or work and another for questions and answers.
4. Alternative - Make available room for open lab - reallocation of existing facilities.

E. HOW IS SPACE SECURED TO STORE UNIPACS?

1. Alternative - Use pigeon hole file (as used for sheet music) to label for easy accessability. (Avoid file cabinets.)
2. Alternative - Keep all unipacs in testing center if possible. If not, use central storage area or portion out part of teacher office area.

IV. THE IMPACT ON THE COMMUNITY:
A. HOW IS PUBLIC SUPPORT GAINED FOR THE PROGRAM?

1. Alternative - Detailed letters to parents of participants.
2. Alternative - Group meetings of parents.
3. Alternative - Individual meeting of student, parent, teacher counselor.
4. Alternative - Pamphlets, brochures, etc.
5. Alternative - Newspaper, T.V., and radio programs relating program.
6. Alternative - PTA meetings devoted to question - answer periods.
7. Alternative - Schedule parent visitations.
8. Alternative - Use student support - panels, group meetings, etc.
9. Alternative - Presentations to community clubs.
10. Alternative - Provide evaluation information.
11. Alternative - Involve parents as aids, resource people, etc.

VI EVALUATION

The success or failure of any program can be determined by planned evaluation. As such, evaluation is an essential and on-going part of the teaching-learning process.

All too often, however, efforts are expended to measure progress toward achievement of a goal or objective only at the conclusion of instruction felt necessary for accomplishment of the goal or objective. As such, evaluation has essentially been end-of-product oriented.

If one believes that individuals learn at various rates, and have different interests and abilities, there is an evident need to evaluate prior-to as well as during the in-progress teaching-learning process. Only when determination is accurately made concerning the learner's location in the course of study can the most appropriate starting point and most meaningful learning activities be prescribed.

> There are a number of components integral to proper use of unipac materials that provide evaluatory data at various points in the use of the unipac materials. Although they have been discussed in Parts III, IV, and V of this Guidebook, the uses of
>
> 1. Pre-tests
> 2. Observation (teacher)
> 3. Self-tests
> 4. Post-tests
>
> are critical to answering questions regarding evaluation of pupil achievement in the use of unipacs. Data for _formative_ and _summative_ evaluation of student learning are thus available which help answer questions relative to achievement.

Our concerns in this section as they pertain to evaluation are therefore three-fold:

1. What role does the use of the unipac play in evaluation?
   a. What are the learner achievements in terms of the concept or content under study?
      (1) How is achievement determined prior-to, during, and upon completion of that which is under study?
   b. How is the learner achieving in comparison to past performances?
   c. To what degree is the learner achieving?

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2. What are the attitudes of students, teachers, and
   parents, toward the use of unipacs?

3. What techniques are employed to evaluate the unipac
   from the points of view of both the learner and
   the teacher?

This section attempts to provide the reader with a variety of
examples such that he may create his own set of evaluatory
instruments in attempting to answer the above concerns.

Example No. 1

This is a progress report on _____ who
is presently enrolled in _____. The number
marked on the graph below indicates the Unipac that has been
completed at this time. (Time is indicated on the bottom line
marked "(B)") If the number falls above the line that connects
the zero (0) and the one (1) year course completion point and
the student continues at approximately the same rate he will
probably finish the course in less than one year. If the number
falls on that line and he continues at approximately the same
rate, he will probably finish in one year. If the number falls
below that line and he continues at approximately the same rate
it will probably take more than one year to complete the course.

If you would like to project the approximate time for
completion of the course, draw a line from the zero (0) point
through the number marked on the graph and extend it until it
reaches the top line marked (A). Now read the time directly.
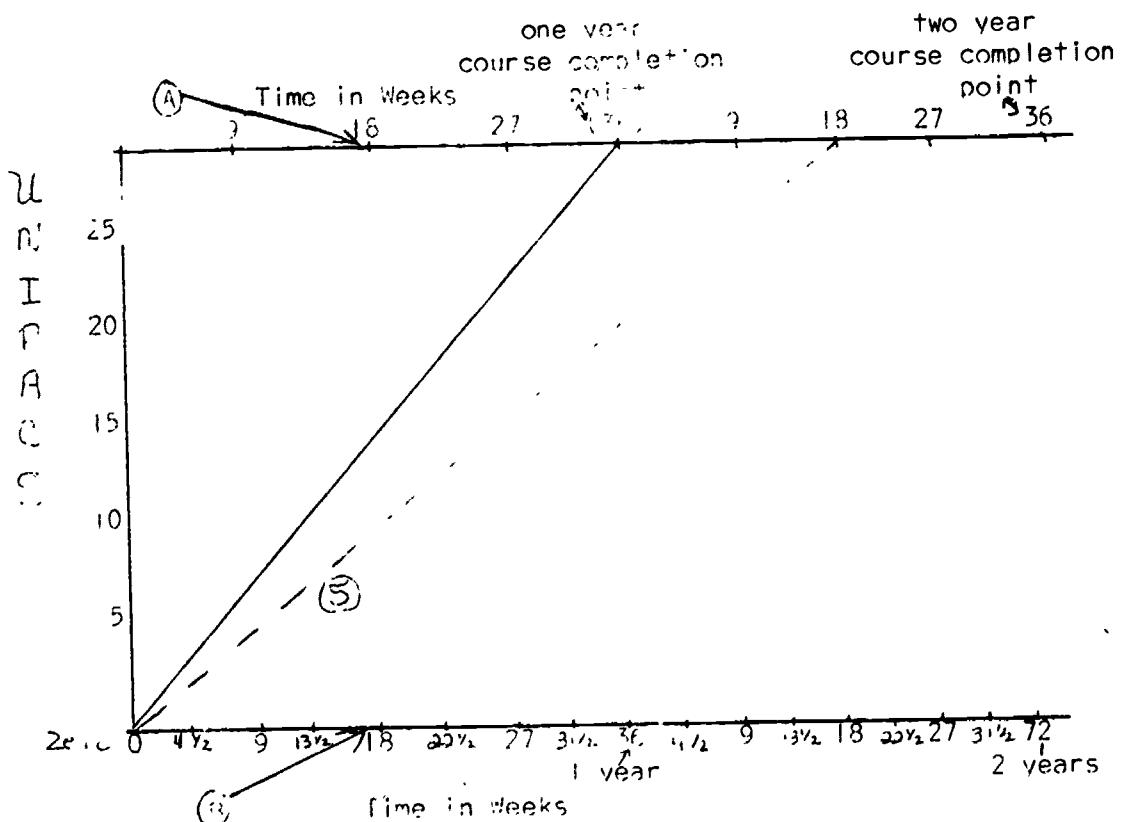
EXAMPLE:

If Jane has completed Unipac (5) at the end of 9 weeks and she
proceeds at approximately the same rate (see dotted line) the
remainder of the year, she will probably finish the course in
1 1/2 years.

If you have questions, please call your child's teacher at
_____.

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Example No. 2

STUDENT EVALUATION REPORT

IN _____

THIS FORM MUST BE RETURNED WITH PARENT'S SIGNATURE BY _____

FIRST SEMESTER REPORT   Date _____

If Unipacs I through 17 have been completed, a grade of A, B, or C will be recorded on the report card and one-half credit given. If these Unipacs are not completed an "Incomplete" will be recorded on the report card. This "Incomplete" will be removed and a grade of A, B, or C will replace it when the required Unipacs are completed.

At present _____ has an average grade of _____ for the Unipacs he/she has completed, as indicated below:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 22 23 24 25 26 27 28 29 32

(Unipacs 21, 30, 31, and 33 are optional)

Your son/daughter is

_____ doing satisfactory work

_____ not doing satisfactory work

Comments concerning strengths and weaknesses of the work of your son/daughter.

_____   _____
Teacher   (Parent's signature)

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STUDENT SURVEY

On the answer sheet provided, please indicate the number that best describes your answer for each question.

1. Strongly disagree
2. Disagree
3. Uncertain
4. Agree
5. Strongly agree

1. While taking the course as presented, I felt challenged to do my best work.

2. I was concerned that I might not be understanding the material.

3. I was not concerned when I missed a question because no one was watching me anyway.

4. While in this course I felt isolated and alone.

5. I felt uncertain as to my performance in the course relative to that of others.

6. I found myself trying to get through the material rather than learn it.

7. I knew whether my answer was correct or not before I was told.

8. I guessed at the answers to the questions.

9. In a situation where I am trying to learn something, it is important to me to know where I stand relative to others.

10. As a result of having studied some material by this method of instruction, I am interested in trying to find out more about the subject matter.

11. I enjoyed the course a great deal.

12. I felt I could work at my own pace with this method of instruction.

13. This method of instruction makes the learning too mechanical.

14. I felt as if I had a private tutor.

15. I was aware of efforts to suit the material specifically to me.

16. I found it difficult to concentrate on the course material because of the class around me.

17. Questions were asked which I felt were not relevant to the material presented.

18. This method of instruction is an inefficient use of the student's time.

19. After having this course, I feel I enjoy school a little more than before.

20. This method of instruction made it possible for me to learn quickly.

21. I felt frustrated by this method of instruction situation.

22. This method of instruction is flexible.

23. Even otherwise interesting material would be boring when presented by this method of instruction.

24. In view of the effort I put into it, I was satisfied with what I learned.

25. In view of the amount I learned, I would say this method of instruction is superior to traditional instruction.

26. I felt as if I had a personal tutor with this method of instruction.

27. I am not in favor of this method of instruction because it is just another step toward depersonalized instruction.

28. This method of instruction is too fast.

29. I feel that the school is really trying to do something beneficial for me.

30. This method of instruction is boring.

Example No. 4

PARENT SURVEY

Directions:

The _____ school system is conducting a survey on parent
impressions concerning pupil attitudes toward school this year. This
questionnaire is designed to find the degree to which parents are
aware of the attitudes of their children relative to the school program
and to improve our program for the creation of better student attitude.
We would appreciate it if you would answer the following questions
witnout consulting your child. If you feel you don't have enough
information to answer a particular question, please do the best you can.
Your response will be anonymous. Please make comments about any
question you might wish to.

Please answer the questions as they pertain to your child in grade _____.

On the answer sheet provided, please indicate the number which best
describes your answer for each question. Please return both the answer
sheet and the survey form in the enclosed envelope. Your careful
consideration is appreciated.

1. Is your child more interested in some school-connected project,
    activity, or subject this year than in previous years.
    __1_ Yes   __2_ No

2. What is your child's general attitude toward school?
    __1_ Enjoys   __4_ Mildly dislikes

    __2_ Likes it, somewhat   __5_ Totally dislikes

    __3_ Doesn't care

3. Has your child been involved in any experimental programs at
    school this year?
    __1_ Yes

    __2_ No

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4. How do you feel about having your child involved in a new or experimental program?

___1___ favorable; No reservations

___2___ generally favorable; some reservations

___3___ no opinion

___4___ generally opposed, except for special circumstances

___5___ totally opposed

5. Does your child pursue at home any activities initiated or required by the school?

___1___ Yes

___2___ No

6. How much does your child talk about his school subjects at home?

___1___ Frequently ___2___ Sometimes ___3___ Rarely ___4___ Never

7. To which subjects does he seem to react most positively?

1) Math   4) Social Studies

2) English   5) Other (specify-here and mark
                                           on answer sheet)

3) Science

8. To which does he seem to react most negatively.

1) Math   4) Social Studies

2) English   5) Other (specify here and mark on
                                           answer sheet)

3) Science

9. If your child talks about classes, what aspects does he discuss?

___1___ Unipacs

___2___ Small group discussion

___3___ Large group discussion

___4___ Independent study

___5___ Teachers

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Indicate the degree to which you feel the work done in each area at school is important and relevant to your child's life:

		Always	Most of the time	Seldom	Never
10.	English	1	2	3	4
11.	Math	1	2	3	4
12.	Science	1	2	3	4
13.	Social studies	1	2	3	4
14.	Other	1	2	3	4

(Specify here and mark on answer sheet)

15. Does your child appear to enjoy school more this year than in previous years?

___1___ Yes

___2___ No

16. Which of the following does your child use as outside resources for his school work?

___1___ Hand outs by teacher   ___4___ Encyclopedia

___2___ Newspaper   ___5___ Reference books in specific areas

___3___ Magazines

17. What do you feel motivated the child to use these resources?

___1___ Teachers   ___4___ Peers (friends)

___2___ Self

___3___ Parents

18. To what extent does he/she enjoy homework?

___1___ Enjoys   ___2___ Tolerates   ___3___ Hates   ___4___ Refuses to do

___5___ Given no homework

19. Subject for which he least enjoys doing homework

___1___ Math   ___4___ Social Studies

___2___ Science   ___5___ Vocational Education

___3___ English

20. Subject for which he most enjoys doing homework

  1 Math   4 Social Studies

  2 Science   5 Vocational Education

  3 English

21. What school activity has your child enjoyed the most this year?

  1 Studying   4 Dances and Social Events

  2 Athletic games and contest   5 Drop in

  3 Clubs

22. In what subject has your child made the greatest progress this year?

  1 Math   4 English

  2 Science   5 Other (specify here and
                                    mark on answer sheet)

  3 Social Studies

23. Would you like to see a similar program carried on for your child
    next year?

  1 Yes

  2 No

24. Which, if any, of the following teachers of your child have you
    visited with this year?

  1 English   4 Social Studies

  2 Math   5 Other (specify here—mark
                                    on answer sheet)

  3 Science

25. Under what circumstances in question #24?

  1 P.T.A.

  2 Principal or Ass't Principal request

  3 Self-initiated

  4 Teacher-initiated (including advisor)

  5 Other (Specify here and mark on answer sheet)

Example No. 5

Dear Parent:

You recently received a letter of explanation and an indication of
how your son/daughter is progressing under the UNIPAC program.

We would appreciate knowing your reaction to the program. Would you
please complete the following and return it in the enclosed envelope.

1. Was the explanation of individualized continuous progress stated
   clearly?

   ☐ Yes   Comments: No ☐

2. Were you able to determine the progress of your son/daughter
   in their course?

   ☐ Yes   Comments: No ☐

3. Were you able to determine where your son/daughter was in
   relation to course requirement for credit?

   ☐ Yes   Comments: No ☐

4. Do you feel there are benefits to be gained by your child in
   using Unipacs?

   ☐ Yes   Comments: No ☐

5. Do you feel it is disadvantageous to your child to use Unipacs?

   ☐ Yes   Comments: No ☐

6. Do you feel the grading system is adequate under the present
   program?

   ☐ Yes   Comments: No ☐

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STUDENT EVALUATION FORM
for

_____ UNIPAC
(title)

Please answer the questions honestly and critically. Please do this
by yourself.

1. Was the package introduced sufficiently? _____ If not, what else
   should be included? _____

2. Were the directions to the learner clear? _____ If not, what
   specific part was not clear? _____

3. Were the behavioral objectives stated in a manner that you knew
   what you were to learn and to what degree it was to be learned? ___
   If not, what behavioral objectives should be restated? _____
   _____

4. Were sufficient learning activities included for you to master the
   behavioral objectives? _____ If not, which one(s) need more?
   _____

5. Did the self-test test what the behavioral objectives stated, _____
   If not, which question(s) did not? _____

6. Were sufficient questions presented to arouse your interest to
   research certain topics in more detail and depth? _____ If not,
   what question(s) should be included? _____

7. How many other students did you work with on this TP during your
   independent study time? _____

8. Did you use the bibliography? _____

9. Did you find any other material (not listed) that was of benefit
   to you? _____ If yes, what was it? _____

10. Did you find it hard to work independently on this package? _____
    If yes, what should be done to make it easier for you to work
    independently? _____
    _____

11. Other suggestions for improvement. _____
    _____
    _____

Example No. 7

STUDENT RATING SCALE

for _____ UNIPAC
                    (title)

Indicate the number that best describes your feelinas toward rhis unit.
(5-stronqly agree; 4-agree; 3-uncertain; 2-disagree; 1-stronqly disaqree)

1. The objectives of this Unit were clearly defined.

    5   4   3   2   1

2. The outside homework was adequate.

    5   4   3   2   1

3. Teacher help was available if needed.

    5   4   3   2   1

4. I enjoved working this Unit.

    5   4   3   2   1

5. I nad a feeling of accomplishment upon completion of this Unit.

    5   4   3   2   1

6. The material in this Unit was appropriate to me as a learner.

    5   4   3   2   1

7. I felt a lack of direction while working in this Unit.

    5   4   3   2   1

8. I feel this Unit should be improved.

    5   4   3   2   1

9. I felt that the material in this Unit was too difficult.

    5   4   3   2   1

10. I thoroughly understand the material.

    5   4   3   2   1

Suggestion for Unit improvement.

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Example No. 8

STUDENT EVALUATION OF REVIEW PACKAGES (UNIPACS)

1. Were the activities written in a way that you could understand?
   If not, why not?

2. Were the objectives stated clearly? If not, give one example.

3. Were there enough activities to master each objective? If not,
   give one example.

4. Did the self-test test what the objective said? If not, which
   one(s) did not?

5. How many review unipacs did you skip?

6. Did the tapes help you master the objectives? If not, which
   one(s) did not?

7. Did you find any other material (not listed) that was of benefit
   to you? If so, what?

8. Was there repetition of material? Where?

9. What did you like best about this set of packages?

TEACHER'S EVALUATION OF UNIPACS

Please answer each of the questions on the attached answer sheet, regarding the use of unipacs, using the number below that best describes your answer for each question.

        1. Strongly disagree
        2. Disagree
        3. Uncertain
        4. Agree
        5. Strongly agree

A. 1. Level of achievement higher than in past years (on written exams).
    2. Level of achievement higher than in past years on oral exams.
    3. Students learned to read mathematics better.
    4. Students are more analytical.
    5. Students understand concepts better.
    6. Students ask clear and concise questions.
    7. Able students become largely independent.
    8. Enables teacher to know students better.
    9. More rapid progress.
  10. Students work closely with other students.
  11. Better retention.
  12. Greater generality in learning of concepts.
  13. Positive comments by students on evaluation.
  14. Allows all students to proceed at own rate.
  15. General discussion in some areas.

B. 16. Provides for independence.
  17. Students know exactly what is to be learned.
  18. Students ask questions they want answers to.
  19. Students work with groups of own choice.
  20. Provides means of self-evaluation.
  21. Provides opportunity for relearning or recycling.
  22. Allows students to take a breather from subject.
  23. Requires students to learn to read.
  24. Requires students to develop ability to learn more and faster.
  25. Provides for development of self-discipline.
  26. Provides for content input as well as structure by student.

C. 27. Poor attitudes develop for slower students.
  28. Many students not working.
  29. Some good students did not achieve higher grades.
  30. Do not provide for slow student who couldn't pass.
  31. Does not provide for discussion.
  32. Average students openly showed dislike (too hard, boring, don't learn).
  33. Student progress too slow.
  34. Does not require reading.
  35. Students procrastinate, not overcome.

D. 36. Lack of teacher guidance in early stages of course because of
inexperience.
37. Lack of experience in teaching methods.
38. Few or no good models to follow.
39. Inadequate texts available for student reference.
40. Low reading ability of students.
41. Average 9th grader not mature enough to handle continuous
progress (unipac).
42. Too little teacher-student contact time for many students.
43. School climate is characteristic of non-motivation.
44. Unipacs often poorly written.
45. Students often use only self test for learning.
46. May spend too much time writing and not exchanging ideas.
47. Students may feel it is not important to come to class.
48. Classes are too large.
49. Unipacs not readily available for students.
50. I found this a big adjustment for me as a teacher.
51. I was unhappy with self-performance.
52. I was more aware of curriculum.
53. I was more aware of individual differences.
54. I was more aware of individual planning and implementation.
55. It was a more rewarding experience when working with students.
56. I had more interaction with students.
57. I had more work as a teacher.
58. I worried more about slow students.
59. I found being a resource is not rewarding.
60. I had to explain the same procedure an excessive number of
times in the same class.
61. This method of instruction limits my creativity.
62. I had long periods of frustration and boredom because of
routine efforts.
63. I had too little time for change and improvements.

E. 64. Individual work with students was extremely important.
65. Use of blackboard as a guide to students was very helpful.
66. Small groups within medium groups was very helpful.
67. Small group lectures were important.
68. Use of resource center by student very important.
69. Students working by themselves tend to loaf.
70. Circulation about class, asking for questions is more beneficial
than sitting in front of room.
71. Classes must be similar to open lab.
72. The lock step approach would be a better technique than
continuous progress.
73. The complete course structure in hands of student increases
student learning.

F. 74. I was given the flexibility of scheduling and rescheduling my students.
   75. I had great administrative support for classroom autonomy in matters such as attendance, etc.
   76. Critical self analysis.
   77. Involve mult-media personnel in development and redesigning unipacs.
   78. Setting minimum level for a course on a lock step basis is superior for continuous progress.
   79. Student should have choice of using or not using unipacs.
   80. More class time for traditional techniques is a necessity.
   81. Multi dimensional learning activities are always necessary.
   82. A variety of evaluation techniques for students is a necessity.
   83. Classes of uniform size are necessary for success.
   84. An open lab with teachers available is a necessity.
   85. Fast feedback on tests is necessary for the motivation of most students.

G. 86. I am convinced individual continuous progress is better.
   87. I often spend too much time with the non-motivated slow students.
   88. Unipacs should be used only for very good and the slower students.
   89. Unipacs should be integrated slowly as grade level increases. (9 10 11 12)
   90. Unipacs are useful for assisting students with difficult material in my area of instruction.
   91. Teachers should decrease emphasis on written work.

Example No. II

DATA COLLECTION DEVICE

Today I Used UNIPAC Materials	With Teacher Activities	And Student Activities	To Accomplish Objectives	I Rate the Extent to Which Accomplished this	Pre-Test Score on UNIPAC	Post-Test Score on UNIPAC
7A	P, O, and R	A & B	1. A 2. B 3. C 4. 5. 6.	9 2 3	20%	95%
8f	O	A & R	1. D 2. 3. 4. 5. 6.	9	25%	75%

Such a data collection device will result in being able to say "teacher activities such-and-so coupled with student activities such-and-such lead to the accomplishment of student objectives such-and-so at blankety-blank levels."

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DATA COLLECTION DEVICE

OBJECTIVES OF THE UNIPAC	ACTIVITIES IN WHICH ENGAGED	PROGRESS TOWARD OBJECTIVE	COMMENTS
		No Progress 1 2 Some Progress 3 4 5 Great Progress 6 7	
		No Progress 1 2 Some Progress 3 4 5 Great Progress 6 7	
		No Progress 1 2 Some Progress 3 4 5 Great Progress 6 7	

Example No. 13 - CHARTING STUDENT PROGRESS

COURSE		UNIPACS																						
NAME:		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Trump, Lloyd J.   Ovar, G. & Smith, J.B. & Trump, J. & Goodland J.
Answers and Questions   Individualization of Instruction and Unipacs
16 mm. film   Viso-tape films (Concord 1/2 inch)
N.A.S.S.P., 1201 Sixteenth St., NW.   Materials Center of IDEA, 730 N. Euclid St.
Washington, D.C. 20036   Suite 304, Anaheim, California

GUIDEBOOK EVALUATION FORM

I. Was the guidebook effective in assisting you in using unipacs?

Yes _____ No _____

Why?

II. Did the preface outline goals and objectives clearly define the purpose of the guidebook understandably?

Yes _____ No _____

Why?

III. Were the definitions clear and inclusive?

Yes _____ No _____

Why?

IV. Was sufficient information given on role changes?

Yes _____ No _____

Why?

V. Were the instructions for constructing unipacs adequate?

Yes _____ No _____

Why?

VI. Was the section on introduction and use of Unipacs written in a manner you could use it?

Yes _____   No _____

Why?

VII. Was the section on evaluation inclusive enough in both student progress and program evaluation to be helpful?

Yes _____   No _____

Why?

Were the examples given helpful?

Yes _____   No _____

Why?

VIII. Was the section on concerns adequate in raising and answering questions?

Yes _____   No _____

Why?

Were there concerns that you encountered that were not in this section?

Yes _____   No _____

What?

VI. Was the section on introduction and use cf Unipacs written in a manner you could use it?

Yes _____ No _____

Why?

VII. Was the section on evaluation inclusive enough in both student progress and program evaluation to be helpful?

Yes _____ No _____

Why?

Were the examples given helpful?

Yes _____ No _____

Why?

VIII. Was the section on concerns adequate in raising and answering questions?

Yes _____ No _____

Why?

Were there concerns that you encountered that were not in this section?

Yes _____ No _____

What?

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IX. How would you rate the overall value of this guidebook?

(   ) Very Beneficial   (   ) Beneficial   (   ) Adequate   (   ) Inadequate

X. What could be done to improve the guidebook?

Answer: